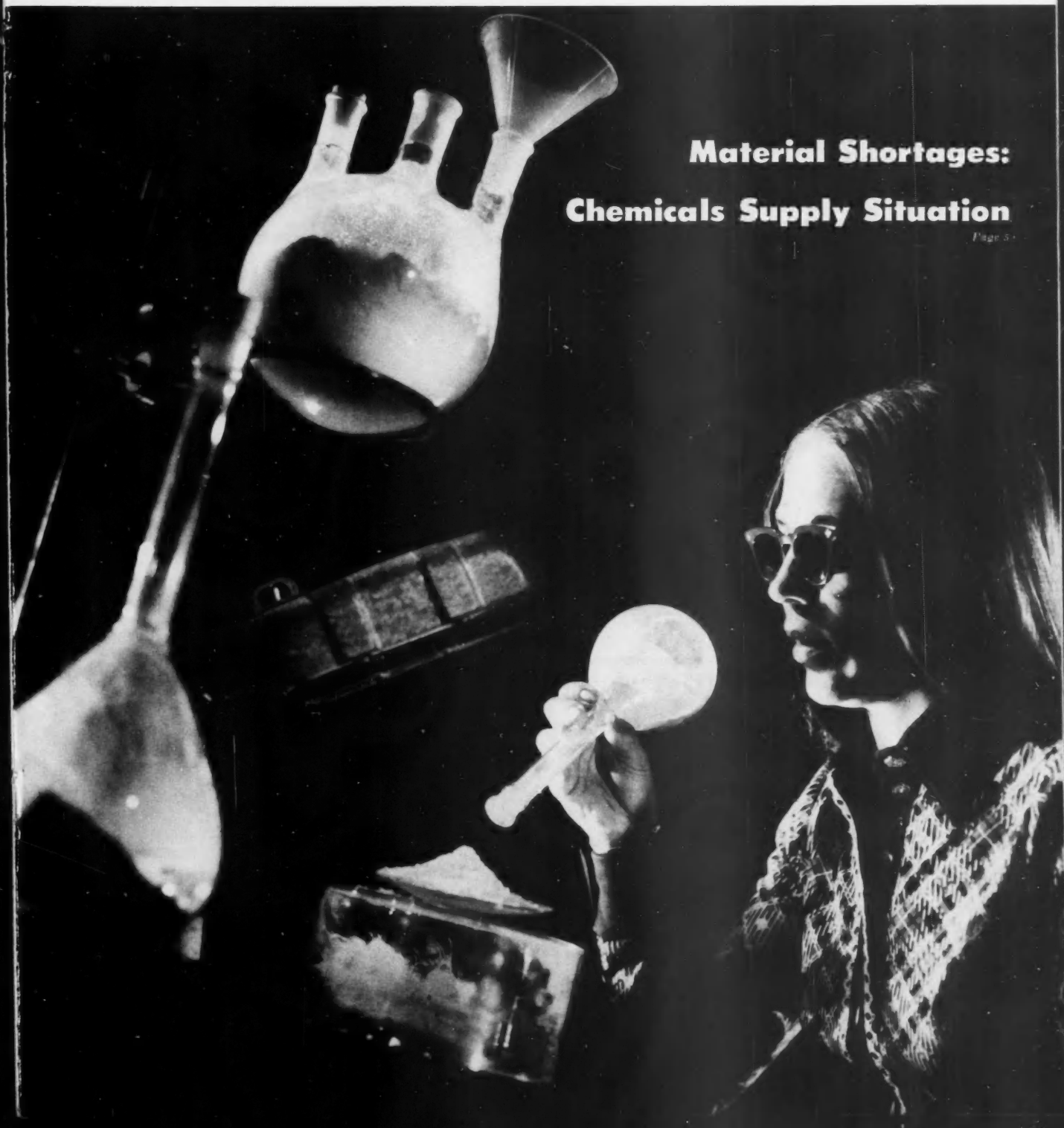
MAY 27, 1974

Commerce Today



Material Shortages: Chemicals Supply Situation

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FROM THE SECRETARY

Metric—More Imperative Than Ever

This column was written by Under Secretary of Commerce John K. Tabor.

Rejection by the House of Representatives recently of a measure that would permit a voluntary 10-year conversion by the United States to the metric system is especially disappointing when one considers the legislative history surrounding efforts to get this system adopted.

These efforts date back to the beginnings of the Republic, when George Washington first urged the nation to adopt a "uniform and stable" system of weights and measures. Since then, every industralized country in the world with the exception of the United States has gone or is in the process of going metric—with government sanction.

We are left in the distinctly dwindling company of such countries as Burma, Tonga, and Sierra Leone which have declined to adopt what John Quincy Adams called "in its design the greatest invention of human ingenuity since that of printing."

Obviously, our trade with other nations and the cost of doing international business are adversely affected by remaining in that tiny minority that eschews metric.

In addition, a voluntary conversion effort is merely recognition of the reality of the moment. For, as a practical matter, the country is going metric. Such influential companies as General Motors, IBM, Honeywell, International Harvester, Ford and Caterpillar Tractor have committed themselves to the metric system. School systems in California, Maryland, Michigan, Alabama and South Carolina are emphasizing metric, while many others are introducing it into their curriculums. Around the country auto mechanics already keep on hand metric as well as customary tools to work on cars with metric parts. The fact that many automobiles in this country now have such parts is further evidence that the metric wave is upon us and not still forming on some future horizon.

This is why an orderly, systematic approach toward adopting metric is more imperative now than ever. Such an approach, phased over a decade, would eliminate much of the confusion, false starts, financial burdens, and uncertainty that will be associated with an unruly piecemeal overhauling of our units of weights and measurement.

The opponents of conversion cited prohibitive costs and job retraining obstacles as the reasons for scrapping metric legislation. Hence, it is instructive to consider the United Kingdom's experience in this area.

In correspondence that we have had with the British Standards Institution, one of their officials writes: "UK industrial experience has been that with properly planned programs for a phased changeover at the company level the costs are not excessive and we have seen no evidence that small or middle-size businesses have suffered financial difficulties because of metrication. In addition, we have found that there is no problem in retraining the work force. Workers quickly adapt to the very few metric units that they have to use and we have no evidence that British workers have suffered as a result of the conversion programme."

We should add, as to such tools as would need replacement, that the changeover contemplated by the pending bill, is to occur over ten years, a period during which many craftsmen and tradesmen would ordinarily replace a good portion of their tools in any event.

Hence, much of the expressed concern should be dissipated when the bill's contents and impact are understood.

On the positive side, metric will strengthen our competitive position for product, engineering and design sales around the world; and bring logic and simplicity to our measuring system.

The bill should be brought up for consideration again in the House under the Rules, rather than under a suspension of the Rules —the parliamentary posture in which it was defeated. At that time, we hope Congress will act on President George Washington's first message to Congress, delivered January 8, 1790:

> ***"Uniformity in the currency, weights, and measures of the United States, is an object of great importance and will, I am persuaded, be duly attended to."***

On the eve of the nation's 200th birthday in 1976, let us look forward to having this matter, so long delayed, finally "duly attended to."

John K. Tabor

Commerce Today

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COVER: *This young chemist at General Electric Research and Development Center at Schenectady, N.Y., relies on a steady supply of chemicals, a problem which has developed as in many other industries of the nation where shortages are becoming serious. Story beginning on Page 5 is the second of a series detailing the raw materials situation, in this case in the organic and inorganic chemicals, petrochemicals and plastics industries.*

ECONOMIC
HIGHLIGHTS

Retail Sales Show Signs Of Regaining Balance Despite Impact Of Prices On Purchasing Power

Economic Highlights is prepared by Dr. Sidney L. Jones, Assistant Secretary of Commerce for Economic Affairs.

Retail sales continue to be a closely watched indicator in assessing the general outlook for the entire economy. Various surveys of consumer sentiment declined sharply last year reflecting an array of uncertainties and employment security concerns. Nevertheless, retail sales have continued to rise as a result of strong consumer demand and inflation pressures. The current pattern of sales continues to vary but it appears that consumer spending, particularly for automobiles, is stabilizing. The demand for consumer goods is a vital factor in the hoped for acceleration of economic activity over the remaining months of 1974. In turn, actual spending will be heavily influenced by the pattern of inflation.

Retail sales

In dollar terms retail sales have scored substantial gains since the low point last December. April sales of $44.4 billion were $2.3 billion, or 5½ percent, higher than in December. Department store sales have jumped 6½ percent in the same period. Sales in the automotive sector apparently bottomed out in February and have recorded modest sales improvement in recent months.

Any euphoria that might result from looking at the current sales figures, however, must be tempered by comparing them with results of a year ago and by adjusting for price increases. Total retail sales have increased only 7.8 percent over the last 12 months ending with April, indicating that the physical volume of sales is down slightly. Auto sales are down 9 percent in dollar terms, and increases of 12 and 15 percent in the sales of food and gasoline are less than the price increases in these two categories. Only department store sales apparently are ahead of last year in real terms with a 13 percent increase in dollar volume.

Cautious mood

In real terms, retail sales have been flat or declining since the first quarter of 1973 and are now 6.5 percent below the level of March 1973.

It appears that consumers started reacting to the high rate of inflation and other uncertainties in the second quarter of 1973 and that their cautious mood deepened during the period of greatest concern about energy shortages.

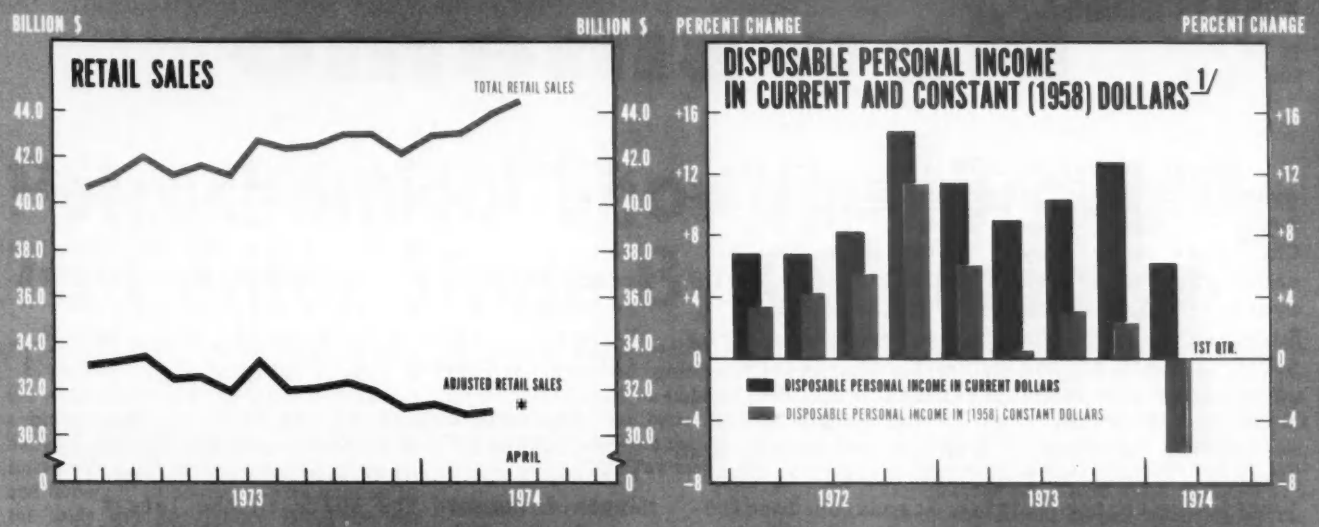
The charts on durable and nondurable goods illustrate the remarkable imbalance among various sectors. Sales of nondurable goods in dollar terms are more than 13 percent above a year ago while sales of durables, which are heavily influenced by automobiles, are slightly below the level of spring 1973.

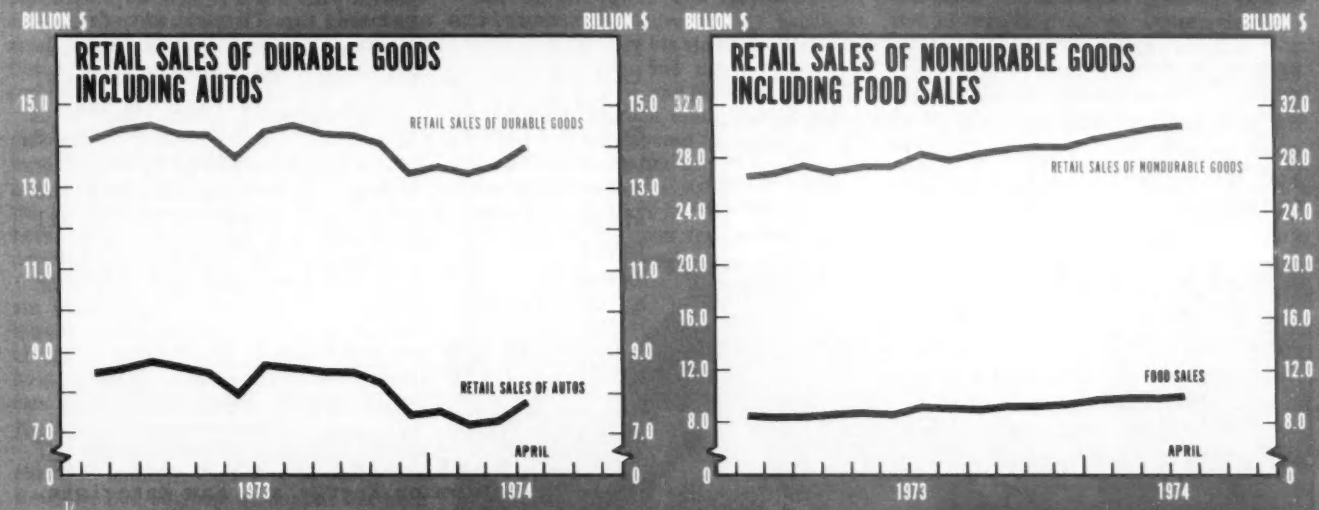
The typical consumer can be considered a fairly willing and perhaps even steady spender if allowances are made for the twin trauma of rapidly rising prices and the Arab oil embargo. Because of inflation, real disposable personal income declined from the fourth quarter of 1973 to the first quarter of this year to a level slightly below the first quarter of 1973. Furthermore, while the chart of disposable personal income shows what has happened to total consumer purchasing power, it does not indicate the full psychological impact. The drop in purchasing power for the average shopper was even greater since total income was bolstered by large percentage increases in farm and interest income that did not figure into the typical worker's calculations of his weekly cash flow.

The real spendable earnings of the typical worker have declined steadily over the past year and are now almost 5 percent below a year ago.

Jobless rate

The well-publicized slowing in the rate of growth in the economy during 1973 (which became a decline in the first quarter of 1974) and the resulting rise in the unemployment rate also affected shoppers' attitudes. The jobless rate declined from 5.1 percent in February 1973 to 4.6 percent by October before jumping back up to 5.2 percent in February of this year. Over the past few months the size of the labor force has remained stable and the unemployment rate





1/ ANNUAL RATES
* RETAIL SALES ADJUSTED IN TERMS OF 1967 DOLLARS ARE NOT YET AVAILABLE FOR APRIL
ALL DATA SEASONALLY ADJUSTED

dropped to 5.0 percent in April. There was considerable imbalance in the economy during late 1973 and early 1974 and a great deal of the unemployment problem was concentrated in the automobile industry and a few other sectors while other industries continued running at or near full capacity. Most workers evidently did not view the "energy-related" pockets of unemployment as a threat to their own job security.

Unusual cross-currents

Like so many other economic reports of recent months, the retail sales charts probably reflect many unusual cross-currents in the economy. In general, it appears that the loss in purchasing power has been mainly responsible for the absence of a strong recovery in the physical volume of sales.

The automobile market obviously has been severely affected by the concern over the scarcity and high price of gasoline. During the period of uncertainty while the auto producers attempted to switch more of their production to smaller, more economical models and dealers had difficulty in disposing of inventories of medium and large-sized cars, car sales and production declined dramatically. It now appears that the inventory/sales balance has been restored and sales have increased in recent weeks although part of the pickup may represent the results of aggressive contests to move the larger-sized models. While analysts do not expect a sudden return of auto sales to year-ago levels, the acceleration of auto sales in March and April has restored some balance to the retail trade picture and should significantly boost the total sales figures. Even a moderate gain in sales of autos would probably provide a strong psychological boost to the economy—above and beyond the actual production, jobs, and income such sales would generate. However, some progress in moderating the intense level of inflation must be forthcoming before the real volume of sales can be expected to increase.

The continued uptrend of current-dollar retail sales and the decline in the saving rate in the first quarter of 1974 indicate the strength of consumer demand but inflation remains the major obstacle.

Newsmemo

Exporters can be hurt if they are unaware of technical standards in foreign markets. Electric irons, sent to Italy for Christmas sale, stayed in the warehouse because they failed to meet Italian requirements. Immersion heaters, delivered to a European country, had to be sent back: wrong screw threads in the conduit cable entry. But up-to-date standards information is now available to U.S. firms through Technical Information for Exporters, offered by the American National Standards Institute (ANSI) in conjunction with the British Standards Institution. ANSI is at 1430 Broadway, New York.

Salt water fishermen who do it for fun are only 21 percent short of the commercial catch. That statistic is part of "Fisheries of the United States 1973," the latest annual report by Commerce's National Oceanic and Atmospheric Administration. Marine recreational finfishing gets special attention in this report. Salt Water Angling Surveys taken in 1960, 1965 and 1970 are reported. In 1970, the recreational fishing catch by 9.4 million persons was 817 million fish weighing 1.58 billion pounds. The commercial catch that year was 2.01 billion pounds. The full 106-page report costs $1.50 from Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C., 20402.

A who's whose of merchant ships. A Maritime Administration compilation has U.S. parent companies owning, at the end of 1972, a total of 552 foreign flag merchantmen displacing more than 34 million deadweight tons. The listing has U.S. parent firms, foreign affiliate owners, place and year built, gross and deadweight tonnage, maximum speed and country of registry. The same information is given on 114 foreign flag ships under construction or on order by foreign affiliates of U.S. firms. For "Foreign Flag Merchant Ships Owned By U.S. Parent Companies," send 90 cents to Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C., 20402.

The little red schoolhouse is now large and green. A Census Bureau report on the 15,781 independent school districts in the U.S. showed them to be a $39.3 billion operation in the 1972 fiscal year. This represented a five-year gain of 73 percent. The total expenditure for salaries went up 75 percent during that period. Of 35 selected states studied, Minnesota had the lead in outlays per pupil during the 1971-72 school year ($1,219). Other leaders: Iowa ($1,138), Pennsylvania ($1,135), Oregon ($1,132), Michigan ($1,081), Wyoming ($1,074), Nevada ($1,064), Vermont ($1,058).

Japanese tourists like the U.S. more and more. Already the leading country of origin for tourists (Canada and Mexico excepted), Japan increased its share in the latest count, for February. That month 67,177 Japanese tourists arrived, up 29 percent from February of 1973. The Japanese share of total arrivals went up more than three points, to 29.9 percent. Next on the list is the United Kindom, with 25,562 February arrivals, up from the 1973 total, but slipping a bit percentage-wise. Two Latin American nations showed outstanding growth rates. The Brazil total of 6,333 was a 53 percent jump in a year; Argentina's 4,628 tourists represented a 106 percent gain.

Energy and raw materials shortages have thousands of implications worldwide. And about a thousand voices--from business and governments everywhere--will examine the implications at Paris June 6-8 in the First World Symposium on Energy and Raw Materials. U.S. sponsor is the Committee for Economic Development. Former Under Secretary of State George Ball, now with Lehman Brothers, is the keynote speaker. Representatives of producing and consuming countries, industrialized and developing, will see how the shortages are affecting living standards, the environment, international trade and investment, and global political tensions.

A step toward safeguarding U.S. households from health or safety hazards is being taken by the Grocery Manufacturers of America (GMA). Newly developed GMA guidelines show how and why products may need to be recalled or withdrawn from distribution channels. They cover food, health and beauty aids, household items, cleaners and toys. There are explanations of product recalls, consumer protections, prevention of recalls, reversing the distribution system, government regulations, legible product coding, and insurance.

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May 27, 1974

Petrochemical Shortages Brought To Center Stage By Oil Embargo

The U.S. should "thank its lucky stars that the Middle East War resulted in the Arab oil boycott," declared a speaker at a recent Chicago conference studying the nation's material shortages outlook. "This forces us to look seriously at this situation, and hopefully to prepare for its solution by the early and mid-eighties. Otherwise our dependence on imports might have become so great that the solution would have been much more costly and required a generation or so longer," said Union Carbide vice president Fred L. Shanklin.

E. L. Flom, Amoco Chemicals' general manager for planning, pointed out that domestic output of both crude oil and natural gas, which are the basic raw materials for the highly important plastics industry, had been unable to keep up with burgeoning demand even before the Arab boycott.

"Even more significant is the fact that we are producing oil and gas at a faster rate than we are adding to reserves. In the case of proved natural gas reserves, we had a 20-year supply in 1962 at the then-current rate of production. Today, it is only a 10-year supply at present rates."

This has major implications for the petrochemical industry, according to Flom. Historically, U.S. ethylene production has been tied to the availability of ethane and propane, much of it extracted from low cost natural gas.

Now, with the supply of gas limited and with prices of available gas starting to rise, Flom says it will become necessary to depend increasingly on liquid feeds for future ethylene production. The much higher investment required for liquid-based olefin units and the rapid escalation of feedstock costs would represent fundamental changes in the U.S. petrochemical industry.

Also, with natural gas already scarce after two decades of price control, and with lower domestic crude oil production forcing a greater dependence on imports, Flom says it is apparent that the petrochemical industry will be competing with the energy sector for its supplies of basic raw materials.

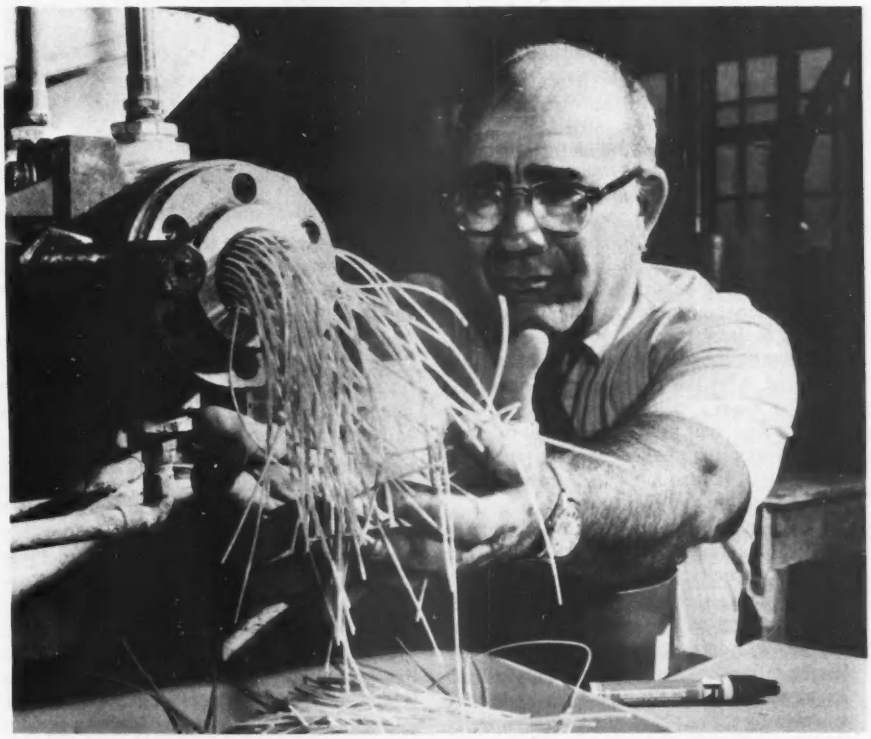
Impact already felt

The higher prices now permitted for 'new' domestic oil have already begun to have a good effect in his view. More effort is being expended to find and produce new domestic oil sources, and the total supply of conventional domestic crude should gradually increase in response to higher prices. Alaskan oil, which should be available by the late '70s, will be a significant and welcome supply addition; but even so, Flom reports that for the next few years the U.S. petrochemical industry has no choice but to depend increasingly on foreign oil—specifically Arab oil, since the Middle East and Africa between them control more than 80 percent of free-world crude reserves.

Meanwhile, significant quantities of synthetic crude made from shale, tar sands and from coal should become available by the mid-1980s to supplement domestic production of regular crude oil. Conservation and prudent usage of all energy resources must continue to be stressed in the years ahead. If done, U.S. dependence on imports should taper off significantly by the end of the '80s, says Flom.

If there is one lesson to be learned, he says, it is this: "The best way to provide a steadily growing supply of chemicals and polymers to meet increasing demand is to

***This is the second in a series of articles covering the supply situation for the nation's essential raw materials. This report covers plastics and organic and inorganic chemicals. Ferrous and nonferrous metals, cement and rubber will be covered in subsequent reports, while textiles, forest products and paper and allied products were reviewed in the April 29 issue of* Commerce Today.**



KEEP IT FLOWING — *The recent oil embargo pointed up the inter-dependence of all areas of the chemical industry, where one firm's finished product is another company's raw material. Many authorities say it was a timely warning which enabled firms to prepare solutions for the materials shortage problem before it became a crisis. Above, an aluminum extruder does its thing at American Cyanamid's Stamford research lab.*

maintain a reasonable financial incentive for each link in the production chain—from the crude oil or natural gas supplier to the resin user. In our present circumstances, if we fail to provide this incentive we will only delay the vital steps which must be taken to keep our industry strong."

The most effective of the recent government actions, in Flom's view, has been the decontrol of chemical prices. One particularly helpful result should be to discourage those feedstock exports that were made primarily to take advantage of higher market prices abroad, he says. "Decontrol not only will enable the industry to meet foreign competition for sources of raw materials, but it will provide additional incentive for the construction of major, new production facilities."

Flom offers a quick rundown of the most probable supply outlook for specific monomers and polymers:

► Looking first at ethylene, supply for the next several years is expected to fall short of meeting traditional demand growth of about 10 percent per year. More extensive use of liquid feeds for ethylene production is likely. Most of the country's natural gas is already being processed, but only about 25 percent of the ethane it contains is being recovered and used for ethylene production. There is considerable interest in extracting additional ethane by cryogenic methods, but processing units are expensive and the price of ethane would have to be high enough to justify the investment.

► As for propylene, the capacity picture is unclear. Supply is extremely tight now, but a higher price could make a substantial difference, encouraging refiners to add propylene recovery equipment and thus make available for chemicals the large amounts of propylene now alkylated and put into the gasoline pool. The expected switch from gas to liquid feeds for ethylene production should also help provide an adequate propylene supply by the late 1970s.

► Benzene, already ultra-tight, will remain so at least through 1977. By the mid-1980s significant quantities may be available from coal. Also the problem of competition with the energy sector arises again: Benzene, toluene, and xylene will have to come from the gasoline pool, although some extra benzene will be available in pyrolysis gasoline from liquid fed olefin units.

► Styrene will continue to be scarce, limited by benzene and ethylene availability and plant capacity.

► As for polymers, essentially we are now operating at capacity, with additions not due on stream until 1977.

► Looking at polypropylene, supply limitations seem certain through 1976, and relief can come by 1977 only if substantial capacity additions are made.

► Low-density polyethylene, unlike other polymers, does not suffer from a shortage of production capacity, but its growth will be hampered by the availabilty of ethylene. High-density polyethylene, on the other hand, will be tighter, with shortages of both capacity and feedstocks.

► Some added capacity for polyvinyl chloride is projected to come on stream in 1975, subject also to the limitation imposed by short supplies of ethylene.

"We now recognize that artificially low, controlled prices were largely responsible for the shortages that plague us today," Flom concludes. "The era of cheap petrochemicals is disappearing, just as the era of cheap energy has gone forever. The need for heavy investment, which can only come with adequate prices and sufficient return on that investment, nails down this prediction with absolute certainty.

"We can have what we need in this country—whether it's gasoline for cars or polymers for plastics—but we'll have to pay for it."

Cabinet level unit

"There is no simple, neat solution to our very complex energy problem," reiterated Union Carbide's Shanklin at the session on organic chemicals. "But the establishment of a cabinet level Energy Department that could recommend directions and policy, clarify and make known our choices, and coordinate a series of national energy policies is an important step."

Such a department, in Shanklin's view, would establish guidelines to make sure the country has sufficient fuel and petrochemical feedstocks. It would help stimulate the expansion of the nation's fossil and uranium resources. It would invest public funds in energy research and development. And it would assure an adequate flow of capital funds for power plant and refinery construction. If need be, it could create the machinery for an energy fund for investment purposes.

"By a coordinated national policy, I mean —of course—an integrated set of programs implemented by the private sector within the traditional framework of competition and common sense." Shanklin says this "places the major burden where it belongs: on industry. Business must remain free to deploy its resources and invest its capital to satisfy production and employment goals.

"The role of government is fundamental to both the formulation and the implementation of such a policy. Government must set the objectives that encourage the sensible consumption of prime fuels so that each is used for what it can do best. And it must do it in a way that does not impede industrial progress.

The government's establishment of priorities providing for 100 percent of industry's requirements for petrochemical feedstocks, its release of many organics from price control, and the relaxation of the oil boycott should cause organic production to approximate or exceed 1973 levels this year, according to Shanklin.

"Union Carbide's operating rate during the first quarter of 1974 probably parallels that of the industry. Our overall average this quarter is probably a little less than 85 percent of capacity for all units, compared to 90 percent a year ago," he said. "Even if feedstocks were unlimited, supply would not equal current demand because there is not enough olefin extraction capacity to operate all present downstream units at full capacity and no major facilities are coming on-stream."

Shanklin pointed out that all fuels raise environmental problems, but virtually all lend themselves to satisfactory solutions. "If experience teaches us anything, it is that we should not put all our energy eggs in a single basket. Think back about 100 years ago, when the Civil War was just over. Eighty percent of our energy was supplied by wood. But gradually, we saw that wood had more than adequate substitutes as a fuel, while it had no substitutes as a raw material. The wood that fuels a fire is quickly consumed, but the wood that supports a house endures for years.

"Perhaps there are greater human needs than energy that can be supplied from oil. Where do we want to be 50 years from now? It has been suggested that an appropriate energy objective for the year 2025 might be 45 percent reliance on coal, 45 percent on nuclear and hydro power, and 10 percent on petroleum. "This is not farfetched when one realizes that though natural gas and oil account for 78 percent of current U.S. energy usage, they make up only 5 percent of total fossil resources," Shanklin said.

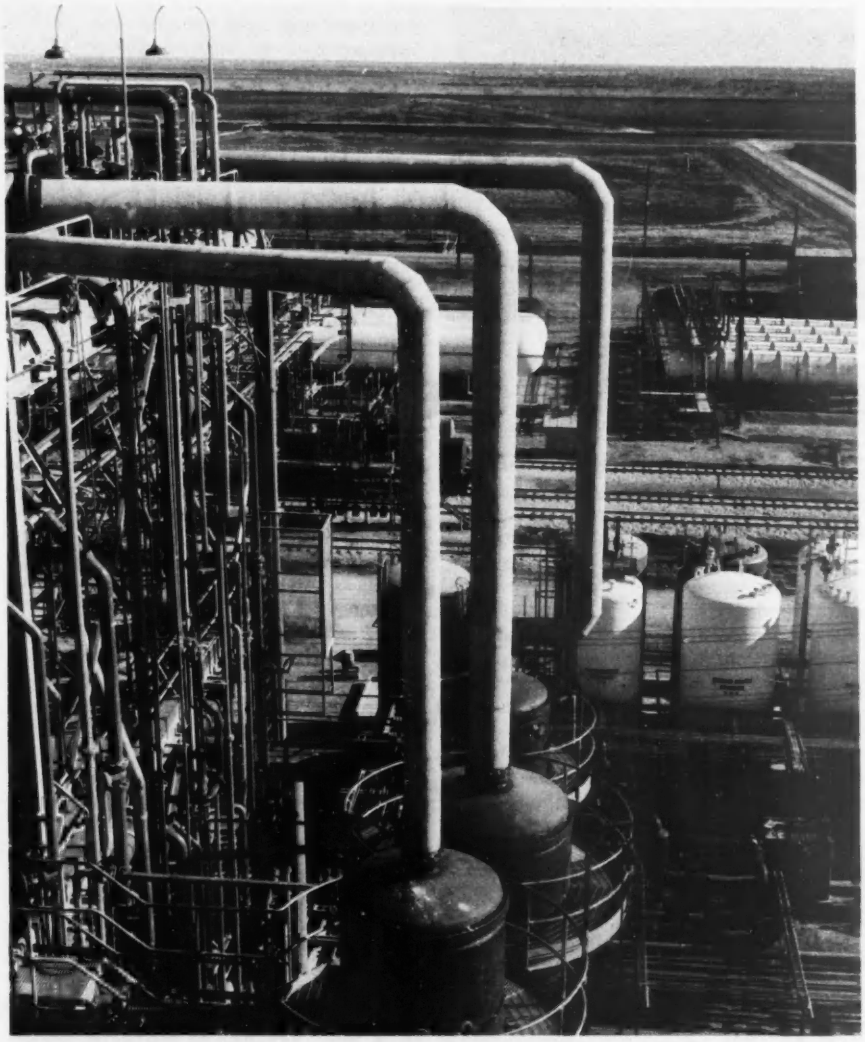
Eighteen-month struggle

"As a supplier, we have struggled through the past 18 months, much of the time restricting the amounts we could ship to our customers, sometimes allocating at below contract rates and, normally, unable to accept any new orders for most of our products," says BASF-Wyandotte Corp.'s Charles F. Gerlach. His firm produces and sells seven inorganic chemicals: chlorine, caustic soda, soda ash, calcium carbonate pigments, bicarbonate of soda, hydrogen and hydrochloric acid.

Shortages feed on shortages, Gerlach points out, and the reason Product "A" is unavailable to a market may be because Product "B" on which it depends, is short in some other market.

Thus, for example, the shortage of sodium sulfate is due in large measure to the fact that there is insufficient caustic soda available to make rayon at the rate producers had predicted.

"As we see demand and supply, it appears that chlorine and Na_2O will stay short through 1974. With the startup of some large new plants in 1975, we will have adequate supplies of chlorine and caustic for 1975 and most of 1976. New expansions will be needed by 1977 to meet the growing demands," Gerlach reports. "Soda ash will re-



TEAMWORK — *With a little belt-tightening, some deep rethinking about methods of operation and an understanding of the other fellow's problems, the chemical industry adjusted to the oil embargo and other raw materials shortages of the recent past. This DuPont petrochemical facility stayed on line.*

main in tight supply until 1977. At that time, major expansions in the western U.S. will be sufficient to meet demands."

He has no definitive answers for improving an inorganic chemicals firm's supply position in periods of shortage, but Gerlach does have some suggestions that could well apply to all industries:

- Select suppliers from both a logistic and a capability standpoint. The chances are that the supplier is also trying to concentrate his business in those accounts that appear to have the best profit outlook and the lowest supply cost.
- Price is always an important portion of any business consideration, but no transaction should depend on price alone. Before making a decision be sure that you and the supplier have carefully considered the other reasons why he should or why he should not be the supplier.
- If you are a major buyer, plan toward more than one source of supply. This is protection against individual production or supply problems, and it also assures you of a historical supply position with more than one source of supply.
- **STICK TO YOUR WORD**—If at all possible, take what you say you are going to take and when you say you are going to take it. A great amount of the pressure on suppliers at the present time is from customers who suddenly want to take up to or in excess of the amounts in their contracts, despite having consistently taken 75 percent or less in previous years.
- Meet with vendors personally, and be sure there are no misunderstandings on what each expects from the other. If there are any doubts about any understandings, reduce them to writing or get a legal opinion, or both.
- To avoid substantial surprises, be sure that you are communicating frequently enough, and at enough levels within your own company, to know what is going on. Even under today's market conditions, we have buyers calling in and saying they need more materials because someone in their organization had failed to notify them of a new use or an expansion.
- Where possible, have the corporation's research or operating people develop or recommend alternate materials for substitution in the event the material of choice is not available.

Commerce industry analyst Winfield W. Sunderland outlined Commerce's role in the material shortages area. "The Department is charged with administering the Defense Production Act of 1950, which assigns a priority rating to orders for materials needed to manufacture defense items. An order so rated must be accepted by the supplier, and he must assign the same rating to any orders he must place for raw materials required to fill the order."

Last year's critical chlorine shortage for treatment of municipal water supplies and wastewater is expected to be repeated again this year, and several bills have been introduced in Congress to provide statutory authority for a federal agency to allocate chlorine supplies as necessary to avert outages. Commerce is surveying all known producers and repackagers of chlorine with an eye toward establishing the true dimensions of the problem.

The Department is also monitoring the fertilizer situation through monthly reports of each major fertilizer ingredient. Analysts are also studying 17 major petrochemicals to spot any runaway in export shipments or dip in output that would put domestic supplies below the danger level.

Commerce also participates in inter-agency committees such as a fertilizer task force designed to curb excessive exports and stimulate production and distribution, as well as a pesticide task force to determine the petrochemical needs of this essential industry, Sunderland reports.

Other governmental units, such as the Federal Energy Office which apportions energy supplies and the Federal Power Commission which controls the distribution of natural gas, are grappling with various aspects of the materials shortage. The Department of Agriculture is urging farmers to have their soils analyzed so that they can cope with expected shortfalls of 5 percent in nitrogen fertilizers and 12 percent in phosphates. Analysis will enable them to determine the proper amounts of the specific nutrients they need, and avoid wasteful guessing.

To end on a less pessimistic note, potash for fertilizer use is expected to be 815,000 tons more plentiful than the demand this year, according to Department of Agriculture estimates, but transportation difficulties may cause problems in some areas.

U.S. Trade Gains In First Quarter Reflect Steep Price Increases

Higher prices contributed nearly all of the expansion in U.S. foreign trade values in the first quarter of 1974. In terms of volume, exports recorded a small gain from the preceding three-month period and imports remained level. The nation's trade position worsened in comparison with the fourth quarter, though it still showed a big improvement over January-March of last year.

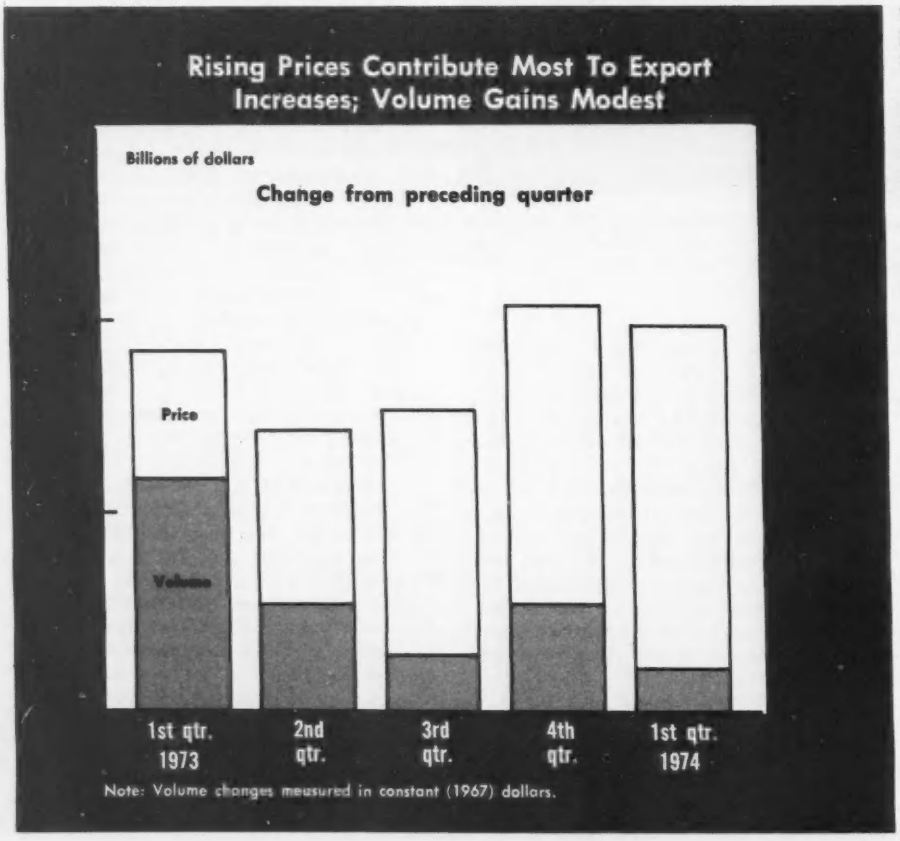
U.S. exports, excluding military grant-aid, rose to a seasonally adjusted annual rate of $89.6 billion (current dollars) in January-March, an increase of one-tenth from the fourth quarter of 1973. Imports, on a customs value basis, advanced 16 percent to a rate of $86.8 billion. Compared with the first three months of last year, exports increased 46 percent and imports 34 percent. The merchandise trade surplus contracted sharply to a $2.7 billion yearly rate from $6.9 billion recorded in the preceding three-month period.

On the basis of the newly reported c.i.f. valuation, imports were running at an annual rate of $92.6 billion in January-March; the trade balance calculated using this figure was in deficit by $3.3 billion.

Although foreign trade values showed rapid increases in terms of current dollars, removal of the price component reveals a much smaller growth rate for exports and no change in imports. On a volume basis, exports increased only about 1½ percent from the final three months of 1973, the slowest advance since the second quarter of 1972. Imports were unchanged in quantity, following a slight decline in the preceding quarter.

The slowdown in exports was probably associated with the reduced pace of economic growth abroad after mid-1973, and particularly since the fuel shortage began last autumn. Moreover, the volume of agricultural deliveries has leveled off in response to improved world supply conditions. On the other hand, exports continued to benefit from an improved competitive position arising from the currency shifts of the past two years, delivery on orders previously received, and commodity shortages abroad.

As expected, the higher cost of foreign petroleum raised import values substantially in the first quarter, accounting for most of the increase in U.S. imports. Prices on many other foreign products climbed rapidly as well. The lack of significant import expansion in quantity terms since early 1973 appears to be related, for the most part, to the relatively slow rate of economic growth in this country during much of last year and the demand dampening effects of higher foreign prices resulting from the monetary realignments.



Nonfarm sales gains continue

Nonagricultural exports continued to advance rapidly in January-March, extending the strong uptrend recorded throughout 1973. At $16.5 billion, these shipments climbed 9 percent from their fourth quarter level, and were two-fifths greater than in January-March of last year. While higher prices were a major contributor to the increases in value, the gain also reflected continued foreign demand for U.S. products. Despite the slowdown in economic activity abroad since mid-1973, exports have benefited from the increased competitiveness resulting from the depreciation of the dollar, substantial order backlogs, and tight world supplies of many basic commodities.

Exports of machinery advanced by 8 per-

cent over fourth quarter 1973 levels to $5.2 billion, accounting for more than one-fourth of the overall increase in nonfarm shipments. Sales of computers and parts, which contributed heavily to last year's machinery export gain, climbed again, and shipments of conventional business machines also rose. Outflows of textile machinery and farm equipment expanded in January-March. Exports of electrical machinery recorded significant increases, particularly telecommunications apparatus—mainly parts for assembly abroad—and electronic components.

Deliveries of automotive products to Canada posted a strong increase in January-March, the first substantial expansion in these exports since the initial quarter of 1973. Some of the gain may have represented shipments delayed because of a strike at a major manufacturer's Canadian facilities late last year, but also reflected continued strong demand for cars and trucks north of the border. Canada, unlike this country, did not experience a slump in vehicle sales and production during the energy crisis.

Civilian aircraft exports, buoyed by deliveries of several wide-bodied passenger jets, particularly to Japan and France, edged up slightly from their fourth quarter 1973 level. Aircraft parts shipments were also marginally higher. Shipments of military aircraft fell precipitously, however, from their unusually large total in October-December, but remained higher than the level in any of the first three quarters of 1973.

Most Export Products Show Gains In First Quarter

Millions of dollars, seasonally adjusted

	Jan.-March 1974	
	Value	Change from Oct.-Dec. 1973
Nonagricultural products, *total*	**16,512**	**+1,348**
Machinery	5,174	+ 397
Office machines and parts	632	+ 55
Electronic components	352	+ 33
Electric power machinery and switchgear	325	+ 32
Telecommunications apparatus	324	+ 46
Agricultural machinery, tractors and parts	197	+ 15
Textile and leather machinery	130	+ 19
Motor vehicles and parts	1,750	+ 135
Aircraft and parts	1,202	− 67
Chemicals	2,002	+ 296
Iron and steel	486	+ 85
Coal	324	+ 12
Paper	253	+ 42
Ferrous scrap	220	+ 84
Agricultural products, *total*	**5,878**	**+ 633**
Wheat	1,066	− 326
Soybeans	1,030	+ 270
Corn	1,008	+ 250
Cotton	336	+ 86

Materials up in price

Shipments of a wide variety of industrial supplies and materials, most at sharply higher prices, were a major factor in the nonagricultural export increase. Following a steep climb last year, exports of chemicals recorded another substantial gain in the first quarter, expanding 17 percent over the October-December level. Shipments of organic compounds and plastic materials again paced the advance. Sales of manufactured fertilizers, which rose steeply in the first half of 1973 in response to heavy foreign demand and high prices prevailing in world markets, have shown only a marginal rise in value since the third quarter of last year and have declined in terms of quantity. Deliveries of iron and steel mill products, which increased steadily throughout 1973, recorded a particularly sharp gain, climbing one-fifth from the preceding three months. Shipments to Canada led the advance. Higher unit values contributed much of the increase in steel scrap exports. Loadings of coal followed a sharp fourth quarter expansion with a further gain in January-March.

Steep price increases were the major factor behind the surge in the value of both paper and wood pulp exports, continuing the advance recorded in the four preceding quarters. Lumber deliveries also climbed, but sales of logs, mainly to Japan, have been on a slight downtrend since April-June of last year despite higher unit values.

Shipments of a number of nonautomotive consumer goods showed sizable increases in the first three months. Although a relatively small part of the U.S. total, these exports have been on a strong uptrend since 1971. In large part, this favorable performance reflects the increased price competitiveness of U.S. products as a result of the currency shifts and growing consumer affluence abroad. Household appliances, sporting goods, and pharmaceutical products contributed heavily to the increase.

Farm sales again buoyant

Exports of agricultural products recorded another substantial increase in the first quarter, climbing 12 percent over the preceding three month's level to $5.9 billion. Compared to January-March 1973, the gain was three-fifths. Higher prices accounted for most of the increase, but quantities were up for some important commodities, indicating continued foreign demand for U.S. farm products. Exports of soybeans led the increase over fourth-quarter 1973 levels, as the volume expanded and prices climbed after declining in the preceding three months. Sales of corn also advanced sharply, as did deliveries of cotton. Wheat exports, on the other hand, declined substantially in value from their peak level in the final three months of last year, despite another large rise in unit values. Sales to the USSR, which had fallen precipitously in October-December, showed a further decline.

Industrial materials imports jump

Imports of industrial supplies surged upward in the first quarter, leading the expansion in purchases from abroad. These entries reached $10 billion in January-March 1974 — nearly one-third greater than the fourth quarter level—and accounted for four-fifths of the overall import increase. All of the advance, however, was due to

Quarterly Changes In U.S. Imports: Value And Volume

	1973				1974
	Jan.-Mar.	Apr.-June	July-Sept.	Oct.-Dec.	Jan.-Mar.
	Percent change from preceding quarter				
Value	+7.6	+4.2	+3.6	+7.1	+16.2
Volume	+4.5	−3.9	−0.1	−1.5	− 0.1

Note: Volume changes measured in constant (1967) dollars.

Petroleum Unit Values Show Huge Increases

	1973				1974		
	Jan.-Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
	Per barrel						
Petroleum and products	$3.00	$3.59	$4.11	$5.64	$7.29	$9.33	$10.96
Crude and partly refined petroleum	3.01	3.54	3.81	5.28	6.71	9.09	11.08
Distillate fuel oil	2.99	4.21	6.80	7.76	11.95	9.35	13.76
Residual fuel oil	2.78	3.10	3.60	5.34	7.30	9.55	9.99

higher prices. In volume terms, purchases of industrial materials were below the level of any three-month period of 1973, reflecting the concurrent reduction in U.S. economic activity and commodity shortages abroad.

Soaring petroleum prices contributed more than half of the value increase in arrivals of industrial materials. The import value of crude oil and products jumped 65 percent over the fourth quarter even though quantities fell as a result of the Arab oil embargo. Price increases on crude petroleum alone lifted these imports by nearly $1 billion; crude oil unit values more than doubled, rising to $9.15 per barrel from $4.11 in the fourth quarter last year. Entries of residual fuel oil, also at substantially higher prices, climbed sharply in the first three months of the year.

After falling in April-June of 1973, the import value of iron and steel-mill products edged upward in the following two quarters and posted a further advance in the first three months of this year. Higher prices, resulting from foreign currency appreciations and a tight supply situation overseas, accounted for all of this rise, however. In terms of quantity, steel entries declined from fourth quarter 1973 levels and were substantially lower than in January-March 1973. Copper imports advanced more than one-fifth, reflecting continued vigorous demand here and limited domestic availabilities. Imports of industrial and agricultural chemicals climbed, particularly organic intermediates and manufactured fertilizers.

Following strikes at newsprint mills in Canada late last year which disrupted production and deliveries, entries of this commodity soared in the first three months from the depressed level in the fourth quarter. Higher prices contributed to the inflow which climbed by one-third. Lumber imports, primarily from Canada, dropped for the fourth consecutive quarter as construction activity in this country remained sluggish.

Imports of foods, feeds, and beverages climbed 14 percent from the final three months of 1973. At $2.9 billion, these purchases accounted for 6.6 percent of U.S. consumers' expenditures on food in the first quarter, compared to 5.6 percent in all of last year.

More than three-fifths of the increase resulted from greater purchases of coffee and sugar. Coffee arrivals surged 37 percent as importers built up stocks in anticipation of future price hikes. The one-third rise in sugar entries reflected increased quotas and higher prices. Meat arrivals, on the other hand, fell from the extremely high October-December total, but were much above levels reached in the preceding quarters.

Small rise in consumer goods

Continuing the subdued pace displayed throughout much of last year, imports of consumer goods recorded a relatively small increase in January-March, climbing only 2 percent above fourth quarter 1973 levels to $5.9 billion. In volume terms, however, these imports declined as they did in the three preceding quarters.

After climbing sharply in 1972, the ratio of consumer goods imports (excluding automotive products from Canada) to U.S. personal consumption expenditures on goods showed only a marginal rise in 1973, reaching 6.6 percent in the fourth quarter, and edged up slightly to 6.7 percent in January-March.

Greater arrivals of automobiles and parts accounted for all of the increase in consumer goods imports from fourth quarter 1973 levels. After declining for the third consecutive quarter in October-December, auto entries from Canada rebounded this year, in part because of makeup deliveries following a strike in December and in part because of strong demand for smaller cars which represent a high proportion of Canada's output.

Purchases of cars from Western Europe and Japan also increased strongly, both in value and quantity. The foreign car share of the U.S. auto market stood at 16.9 percent in the first three months, well above the 15.5 percent proportion in all of 1973 but only slightly higher than the fourth quarter ratio.

Arrivals of nonautomotive consumer goods dropped somewhat from the value recorded in the previous quarter. Purchases of electric household appliances, radio-phonograph sets, and tape recorders declined, reflecting, at least in part, reduced demand because of higher prices. After rising in each of the last two quarters of 1973 from very low levels earlier in the year, entries of motorcycles and parts fell by 12 percent; footwear imports also dropped. The sluggishness in nonautomotive consumer goods entries was offset to some extent by a $100 million increase in imports of numismatic coins stemming from a liberalization of Treasury Department regulations concerning such transactions.

Imports of capital goods slow

Entries of capital goods advanced only slightly. The $2.5 billion total represented a 3 percent rise over the fourth quarter, continuing the pronounced slowdown evident in these arrivals since mid-1973. More subdued U.S. investment spending probably contributed to the deceleration. In January-March, imported capital goods (excluding trucks) accounted for 12.3 percent of the U.S. fixed investment in producers' durable equipment, only slightly above the 12.1 percent ratio in 1973. Following a 4 percent rise in October-December, imports of machinery barely increased this year. Semiconductors were the only major machinery import item that remained buoyant, reflecting very strong U.S. demand and limited domestic availabilities. Arrivals of agricultural equipment and textile machinery declined sharply, while purchases of electric power machinery and switchgear, office machines, and metalworking machinery all remained relatively level. Purchases of civilian aircraft and parts also held even with fourth quarter levels, but entries of trucks from Canada climbed.

Gains with developed areas

The U.S. trade position with most of the developed areas improved in the first quarter. Exports to Western Europe, led by farm products, advanced twice as rapidly as imports from the area. After many years of deficits, a surplus was recorded in trade with Japan in January-March; machinery and farm product shipments to that country posted a large gain, but imports rose much more slowly. The trade position with Canada worsened, however, due to imports of higher priced Canadian oil.

Trade with the developing areas shifted back into a deficit position after recording a small surplus in 1973. Imports from these areas, swelled by arrivals of more expensive petroleum, climbed by one-third from the preceding quarter. Exports rose more moderately but still posted a sizable advance, led by shipments of wheat and military goods to the Near East and chemicals to the American Republics. Exports to the Socialist countries fell somewhat from their October-December levels, but some increase was noted in imports.

This report is another in the quarterly series on U.S. trade prepared by Commerce's International Trade Analysis Staff.

Better Use Of Government Data By Business Aim Of New Survey

Businessmen and women across the nation will be surveyed beginning this summer on their use of government statistical information. Staffers of Commerce's Bureau of the Census expect about mid-July to begin studying the use and users of statistics. This will enable them to assist the business community make maximum use of the tremendous volume of data generated yearly.

The Census Bureau, Uncle Sam's largest statistics-gathering agency, wants to know who, among the business community, uses statistics and how; who doesn't use them and why not; and, most of all, how census statistics can be made more usable and adaptable to the needs of business.

"We have a responsibility to give our client—the American taxpayer—the data he needs to allocate his various resources most effectively," Census Director Vincent P. Barabba explains. "Everywhere we look there is evidence that resources have not been allocated or employed as effectively as they might be. In an open economy such as ours, the businessman needs all the information he can get about his market—as well as about the distribution of goods and services."

Vast storehouse

Virtually all the market information that a businessman requires—age, family status, and income of prospective buyers; geographic distribution of the market; supply of needed raw materials; labor supply at proposed plant sites, etc.—can be found somewhere in the vast storehouse of census data. However, the inability of the potential data user to locate and digest the statistics he needs often creates a barrier between his company and the Census Bureau. This limits the usefulness of data.

Currently the Bureau generates an average of 10 reports each work day—a total of some 500,000 pages of tables, charts, maps, and text per year. Reports range from a two-page summary of weekly retail trade to Census of Manufactures reports of a thousand pages or more. Titles cover topics as broad as "Money Income of Families and Persons" and "The Social and Economic Status of the Black Population" or as narrow as "Electric Lighting Fixtures: 1971" and "Backlog of Orders for Aerospace Companies." Data are also available on computer tapes and in other software packages.

"Add to all of this the various data-use tools we've developed such as our computer mapping techniques, and a potential data user can be swamped," says Barabba who assumed the agency's top post last August after serving as Chairman of the Board of Decision Making Information, Inc., an extensive user of census data. "The task before us now is to tailor this avalanche of data to the requirements of the people and firms who need to use it in their decision-making processes. It's a great challenge. However, we cannot meet the challenge until we know more about our client and his needs. You might say we have not done the one thing we are best equipped to help other people do—that is, understand our market!"

The new multi-phase survey is designed to help the Bureau do just that. Questionnaires will determine just who is using statistics.

"Not just Census Bureau statistics but data from any sources outside the company," explains Mike Garland, Chief of the Bureau's Data Access and Use Laboratories. "Many firms don't realize they are using census data. They use data from various trade journals or even from one of the several Summary Tape Processing Centers without realizing that what they are getting is actually census data tailored to their specific needs by a middleman."

In the pilot survey, questionnaires will be followed up by personal interviews. Senior Bureau staff members will meet with company officials to determine what specific data the company uses, where the data come from, and how they are put to use.

"This may well be the most important aspect of the effort," says Edwin Goldfield, appointed by Barabba to head a new task force studying uses of census statistics. "We expect to learn more from these interviews than from what comes back on paper. That's why we will use personnel well acquainted with Bureau statistics as well as

ADVISERS MEET—*Census Director Vincent P. Barabba (second from left) discusses upcoming survey of data users with members of the Bureau's Advisory Committee from the American Marketing Association. They are (from left): Committee Chairman Robert J. Lavidge, President, Elrick and Lavidge, Inc., Chicago; John E. Smallwood, Associate Director of Retail Information Services, Management Horizons, Inc., Columbus; and Manuel D. Flotkin, Manager, Market and Consumer Research, Sears Roebuck & Co., Chicago.*

with the many possible applications of data. We want to work our way through the company hierarchy to reach the level where decisions are made and then determine the current use and possible future application of statistics there."

The upcoming survey is only one aspect of the Bureau's effort to understand the data market and to reach the businessman with the kind of statistics he needs and can use effectively. Last February, the Bureau launched a series of regional conferences for users of data from the 1972 Economic Censuses. The day-long meetings are sponsored jointly by local U.S. Department of Commerce District Offices, Chambers of Commerce, industrial commissions and similar public and private interest groups. They provide data users with information on the censuses of retail trade, wholesale trade, selected service industries, manufacturing, and construction industries. Such related economic programs as current business, construction, and industrial surveys are also covered.

Interest is growing

Hundreds of businessmen have attended conferences in Dallas, Philadelphia, San Francisco, Seattle, New York, and Boston. Others are already set for Los Angeles, Chicago, Denver, and Atlanta, and plans are under way for conferences in other major cities where interest in learning how to use census data is growing.

Businessmen who do not have an opportunity to attend one of these conferences can learn more about the 1972 Economic Censuses by studying the new Census Bureau publication **Mini-Guide To The 1972 Economic Censuses.** The **Mini-Guide** is a concise reference to these censuses — providing information about the data collected in the individual censuses and the publication program of each. Information is provided on the Standard Industrial Classification (SIC) system, establishment—company classifications, and census geographic areas for which the data are published. The Census Bureau also publishes a quarterly catalog with monthly supplements, describing each of the thousands of reports prepared during the year.

Not only is the Bureau interested in telling businessmen about the availability of its statistics, but it is also concerned about the delivery of its data to users. As long ago as 1969, when preparations for the 1970 Decennial Census reached a peak, the Bureau began to recognize various private, governmental, and academic organizations as Summary Tape Processing Centers for servicing the needs of data users. There are now 175 centers in 45 states, the District of Columbia, and Puerto Rico.

Developed through local initiative, the centers are neither franchised, established, nor supported by the Bureau itself and there are no controls on services or prices. The centers are sources of varying kinds of data services. Many offer general services such as tape copying and printouts of data, while others specialize in geographic coding, computer mapping, or data analysis.

In each case, these centers file a statement with the Bureau indicating their intention to service the needs of census data users and specifying the kinds of activities planned. The services to be offered are determined by the centers' organizers—the Bureau has no requirements—and range from statistics for only the county or state in which the center is located to the full scale of data for all states and the nation as a whole.

While the Bureau assumes no role in the planning or operation of the tape processing centers, the Bureau's Data Access and Use Laboratory maintains a public listing of the centers.

"We see this as a useful means of calling attention to Bureau programs and of encouraging data users to pool resources and avoid possible duplications of effort and extra expense," Garland points out.

With the completion of the 1972 Economic Census, the Bureau has a new product for decision makers: an abundance of statistics showing just what's going on with each industrial and geographic sector of the nation's economy. Barabba sees his agency's research of its own market as an additional opportunity to evaluate the product.

"We will listen to the people who use these data and learn from them," he says. "Then we can determine the changes necessary to make these statistics fit the needs of the businessmen and women who, in fact, are the backbone of the economy. And these ideas, of course, are what we'll need to know in planning the 1977 Economic Censuses and, in fact, all of the Bureau's statistical output. After all, the more we know about the taxpayer's needs, the more the taxpayer gets for his money."

INFORMATION ASSISTANCE—*Census Information Assistant Mary Jane Harvey can assist businessmen requiring data available at Census' reference office at Suitland, Md.*

COMPUTER ROOM—*Census Bureau computers operate 24 hours daily to process the tremendous volume of data available to business. William Burns checks tapes.*

Energy Management Digest

PARING MAKES PERFECT...President Nixon delivered his energy message on November 7, and for that month New York's Consolidated Edison power company had its first negative growth month in gas, electric and steam use since before world War II. Sounds like an instant reversal, but actually it was simply the culmination of a long effort that began when Con-Ed cancelled all sales promotion efforts and disbanded its sales force in 1970. The savings have continued in each subsequent month, with an estimated total cutback amounting to 2.9 million barrels of oil through February of this year. Con-Ed's efforts produced a Sav-Energy Citation, which was recently presented by Commerce Secretary Frederick B. Dent.

INDUSTRIAL ENERGY KIT...The National Industrial Energy Conservation Council (NIECC) has produced a kit aimed at helping industrial firms reduce energy consumption. The kit, "How to Profit by Conserving Energy," provides suggested procedures for calculating the energy content of a product. NIECC, chaired by Secretary of Commerce Frederick B. Dent and chartered for two years at the direction of President Nixon, reports to and advises the Secretary of Commerce on programs and problems relating to conservation within the industrial and commercial sectors. Produced by NIECC's Sub-Council on Technology, the kit offers a form that can be used to measure the energy that enters and leaves a plant during a given period, and to calculate a product's energy content, expressed in British Thermal Units per unit of production. The publication points out that once BTU content is determined, products can be ranked by BTUs per dollar of sales, and BTUs per dollar profit, and thus provide an indicator of product profitability weighed against energy costs. According to the kit, this procedure would also serve to identify prime energy consumption equipment, as well as raw materials with lesser energy content. For copies, write Industrial Kit, Office of Energy Programs, Department of Commerce, Washington, D.C., 20230.

EASIER THAN YOU THINK...With the onset of the energy crisis last fall, Wang Laboratories of Tewksbury, Mass., set what it thought was a very ambitious goal: a 10 percent cutback in electrical and natural gas usage in their 230,000-square-foot, 1,350-man plant. When the results began to become apparent, Wang officials had to rub their eyes in disbelief...the program was "unbelievably successful." November electrical usage was 92.81 percent of the normally expected level; then it dropped to 74.08 percent in December and 61.43 percent in January. Over the same period, natural gas usage dropped to 86.09 percent; then to 54.89 percent, and finally to 48.61 percent. All this was achieved with "minimum impact on the lifestyle of employees."

HOW VALUES CHANGE...Quaker Corp. estimates that about 30 percent of the energy it consumed was wasted. The reason, according to company spokesman: "...because up to now it hasn't been worth the effort or cost to be economical with it." On December 21, Quaker instituted guidelines aimed at achieving a 30 percent reduction with no loss of production or efficiency.

ZEROING IN...After the Aerospace Corp. set a 10-15 percent energy saving goal, November and December electrical usage hit 7½ year lows. The last six months of 1973 showed a 10.5 percent reduction in the electricity and gas consumption rate as compared to 1972. More important, in December of 1973 electricity usage was down 30 percent and natural gas consumed down 21.7 percent. Aerospace determined that 83 percent of the company's total energy usage was represented by air conditioning, heating and lighting. Primary measures concentrated on these areas.

HOME ENERGETICS...Commerce's National Bureau of Standards has prepared a tip sheet of energy conserving suggestions for the home. Single copies of the Home Energy Saving Tips from NBS are available free of charge from Consumer Information, Public Documents Distribution Center, Pueblo, Colo., 81009.

Analysts Predict U.S. Income, Population Centers Of 1990; South, West Seen Top Gainers

From 1969 to 1990, total personal income growth in constant dollars among the states is projected to vary from a high of 203 percent in Florida to a low of 69 percent in North Dakota, which, ironically, had the largest relative growth among the states during 1973. The nationwide gain for the 1969-90 period is projected at 119 percent.

Commerce's Bureau of Economic Analysis expects total personal income to grow at rates well above the national average in three regions: the Southeast—146 percent; the Southwest—131 percent; and the Rocky Mountain—126 percent. In two regions, the Far West and New England, the income gain is expected to be close to the national average. Below average gains are projected in the Mideast and the Great Lakes—110 percent, and the Plains—105 percent.

In 1969, U.S. per capita income measured in 1967 dollars was $3,435. The States with highest per capita income were New York, Connecticut, Alaska, Delaware and Illinois, where income ranged from about $4,000 to about $4,200. At the other end of the scale, income in Mississippi, Arkansas, Alabama, South Carolina, and West Virginia ranged from about $2,200 to about $2,550 in 1969 *(See table on page 15)*.

In 1990, constant dollar per capita income is projected to range from highs of about $7,000 to $7,300 in New York, Alaska, Connecticut and Illinois to lows of $4,400 to $4,900 in Mississippi, Arkansas, Alabama, South Carolina and West Virginia. For the nation as a whole, per capita income in 1990 is projected at nearly $6,200.

Population

The long-term population shift from the northern and central regions to the southwest and western regions is expected to slacken. The most noteworthy changes in trend are evident in the Southeast and Far West. While population growth in the Southeast lagged behind the national average from 1950 to 1969, it is projected to grow faster than in the nation over the next 20 years. Population in the Far West grew at more than double the national average from 1950 to 1969; from 1969 to 1990 the regional rate of growth is projected to be only moderately above the national average. From 1950 to 1969, growth in the Southwest and Rocky Mountains was well above average; from 1969 to 1990 growth in the former is expected to be slightly above average and in the latter slightly below average.

The population increase in the New England, Mideast, Plains and Great Lakes states was below the national average over the past 20 years, and is projected to continue to lag, with the Plains growing at the slowest pace.

These projections represent the best Bureau of Economic Analysis approximation of what can be expected if there are no major policy changes which would result in such developments as a large number of new cities or a reversal of the migration into urban areas. They are neither a goal nor a limit on any state's future economic activity. Such projections are helpful in detecting problem areas and they may facilitate the formulation of policies that would produce alternative results. These projections are also useful in assessing future public and private demands for physical capital related to energy and water resources development and pollution abatement; in meeting the need for such services as education, medical care, and protection; and in measuring market demand.

Spanish-Origin Market In U.S. Is Younger, City-Oriented, Male

Median income of families with a head of Spanish origin was $8,180 in 1972, about 8 percent more than the previous year, according to the Bureau of the Census. Median income of Spanish origin families of five persons—a group likely to have more than one member in the paid labor force—was $9,260 in 1972. For all U.S. families, the median income was $11,120 in 1972.

The U.S. Spanish origin population is about 8 years younger than the rest of the population, the new report shows. The Spanish origin median age was 20.1 years in March 1973, compared with 28.4 years for persons not of Spanish origin. Persons of Mexican and Puerto Rican origin were even younger, each group having a median age of 18.8 years.

The substantial migration to the U.S. of Cubans, mostly adults, resulted in their relatively high median age — 35.3 years.

Other characteristics of the Spanish origin population shown in the report:

- Most families with a head of Spanish origin live in metropolitan areas. In March 1973, over 1.9 million such families, or 83 percent of the total, lived in metropolitan centers.
- There is a higher percentage of single men than single women among Spanish origin persons 14 years old and over. One-third of such men were single in 1973, but only about one-fourth of the women.
- Families with a head of Spanish origin were likely to be large. In March 1973, these families averaged 4.0 persons; over 57 percent had four or more members per family.
- Education attainment levels have been rising dramatically for persons of Spanish origin; one-half of young adults 25 to 29 years old were at least high school graduates, compared with only one-fourth of those 45 to 64 years old.

The report is based on a nationwide study of the Spanish origin population made last year as part of the Bureau's Current Population Survey. An advance report on the survey published in January showed that the nation's Spanish origin population totaled 10.6 million as of March 1973. Included in the estimate were 6.3 million persons of Mexican origin; 1.5 million of Puerto Rican origin; 700,000 of Cuban origin, and 2 million of Central or South American or other Spanish origin.

Where The Markets Are... And Will Be!

State and region	Total personal income (millions of 1967 dollars)			Population (thousands)			Per capita income (1967 dollars)		
	1969	1980	1990	1969	1980	1990	1969	1980	1990
UNITED STATES	691,451	1,068,496	1,517,173	201,298	223,532	246,039	3,435	4,780	6,166
New England	43,110	66,580	93,422	11,735	12,954	14,130	3,674	5,140	6,611
Maine	2,801	3,993	5,371	992	972	992	2,824	4,106	5,415
New Hampshire	2,287	3,778	5,388	724	843	919	3,159	4,483	5,863
Vermont	1,316	2,083	3,020	437	482	519	3,012	4,319	5,822
Massachusetts	21,136	33,024	46,443	5,650	6,267	6,876	3,741	5,269	6,755
Rhode Island	3,209	4,982	6,945	932	1,032	1,115	3,443	4,829	6,228
Connecticut	12,360	18,720	26,255	3,000	3,358	3,710	4,120	5,575	7,077
Mideast	163,560	247,199	343,941	42,111	45,932	50,016	3,884	5,382	6,877
New York	76,180	111,947	153,705	18,105	19,352	20,946	4,208	5,785	7,338
New Jersey	27,350	43,212	60,788	7,095	8,080	8,923	3,855	5,348	6,812
Pennsylvania	40,158	60,754	83,363	11,741	12,649	13,416	3,420	4,803	6,214
Delaware	2,163	3,415	4,914	540	627	707	4,006	5,450	6,946
Maryland	13,949	22,494	34,235	3,868	4,473	5,275	3,606	5,028	6,491
District of Columbia	3,759	5,378	6,937	762	750	750	4,933	7,170	9,249
Great Lakes	146,289	220,315	307,441	39,904	44,005	47,688	3,666	5,007	6,447
Michigan	33,252	49,562	69,602	8,781	9,743	10,645	3,787	5,087	6,538
Ohio	37,446	56,489	78,877	10,563	11,651	12,609	3,545	4,849	6,255
Indiana	17,537	26,577	38,027	5,143	5,784	6,364	3,410	4,595	5,975
Illinois	43,764	65,787	91,014	11,039	12,091	13,056	3,965	5,441	6,971
Wisconsin	14,289	21,899	29,921	4,378	4,737	5,013	3,264	4,623	5,969
Plains	52,589	78,392	107,891	16,202	17,065	18,034	3,246	4,594	5,983
Minnesota	12,478	19,731	28,279	3,758	4,119	4,553	3,320	4,790	6,211
Iowa	9,144	13,367	17,845	2,805	2,913	2,993	3,260	4,588	5,963
Missouri	15,141	23,224	32,467	4,640	5,071	5,439	3,263	4,580	5,970
North Dakota	1,730	2,281	2,917	621	579	563	2,785	3,941	5,177
South Dakota	1,852	2,609	3,384	668	655	648	2,772	3,986	5,227
Nebraska	4,914	7,000	9,450	1,474	1,499	1,557	3,334	4,670	6,069
Kansas	7,330	10,180	13,549	2,236	2,228	2,281	3,278	4,568	5,940
Southeast	119,964	197,992	295,566	43,440	49,828	56,274	2,762	3,974	5,243
Virginia	14,342	23,402	35,638	4,614	5,295	6,135	3,108	4,419	5,809
West Virginia	4,450	6,810	9,089	1,746	1,832	1,845	2,548	3,717	4,926
Kentucky	8,572	13,953	20,520	3,198	3,609	3,982	2,681	3,866	5,153
Tennessee	10,399	17,179	25,920	3,897	4,557	5,191	2,668	3,770	4,994
North Carolina	13,915	22,504	33,305	5,031	5,736	6,465	2,766	3,923	5,152
South Carolina	6,531	10,322	15,127	2,570	2,819	3,122	2,541	3,662	4,845
Georgia	13,181	21,182	31,940	4,551	5,147	5,907	2,896	4,115	5,407
Florida	20,871	39,988	63,320	6,641	8,926	10,978	3,143	4,480	5,768
Alabama	8,563	13,408	19,467	3,440	3,747	4,090	2,489	3,579	4,759
Mississippi	4,896	7,666	10,850	2,220	2,328	2,450	2,206	3,293	4,428
Louisiana	9,608	14,202	19,672	3,619	3,744	3,937	2,655	3,793	4,997
Arkansas	4,635	7,376	10,717	1,913	2,087	2,271	2,423	3,535	4,719
Southwest	49,273	78,004	113,640	16,328	18,210	20,406	3,018	4,284	5,569
Oklahoma	7,296	11,251	16,066	2,535	2,762	2,993	2,878	4,073	5,367
Texas	33,953	53,047	77,063	11,045	12,167	13,580	3,074	4,360	5,675
New Mexico	2,696	4,099	5,730	1,011	1,055	1,131	2,666	3,885	5,065
Arizona	5,328	9,607	14,782	1,737	2,226	2,701	3,068	4,316	5,473
Rocky Mountain	15,007	23,976	33,864	4,943	5,455	5,936	3,036	4,395	5,706
Montana	2,035	2,817	3,654	694	670	665	2,932	4,207	5,498
Idaho	1,996	2,899	3,954	707	708	738	2,823	4,095	5,360
Wyoming	1,041	1,490	1,947	329	331	334	3,165	4,503	5,828
Colorado	7,049	12,097	17,410	2,166	2,586	2,890	3,254	4,677	6,024
Utah	2,886	4,672	6,900	1,047	1,160	1,310	2,756	4,027	5,269
Far West	97,635	149,609	211,967	25,596	28,904	32,086	3,814	5,176	6,606
Washington	12,165	17,408	24,055	3,343	3,550	3,806	3,639	4,904	6,321
Oregon	6,686	10,466	14,754	2,062	2,335	2,537	3,242	4,483	5,815
Nevada	1,866	3,230	5,004	480	616	761	3,888	5,247	6,578
California	76,918	118,504	168,154	19,711	22,403	24,982	3,902	5,290	6,731
Alaska	1,193	1,875	2,795	296	333	391	4,029	5,625	7,145
Hawaii	2,832	4,555	6,646	743	848	979	3,811	5,374	6,790

Japanese Fishing Vessel Hit With Biggest Penalty To Date For Illegal Operation Off U.S. Coast

The heaviest penalties ever levied against a foreign fishing vessel encroaching in U.S. waters—a total of $300,000—were assessed recently against a Japanese vessel and its master after they were taken into custody recently for illegal fishing operations in territorial waters off Alaska.

Commerce's National Oceanic and Atmospheric Administration said that at a March 28 hearing in Federal District Court in Anchorage, a levy of $290,000 was assessed against the vessel, and $10,000 on its master.

Personnel of the U.S. Coast Guard Cutter *Midget*, accompanied by a fisheries enforcement agent from NOAA's National Marine Fisheries Service, boarded the 160-foot *Ebisu Maru 88* for using longline fishing gear 2.2 miles from the U.S. coast near Umnak Island, Alaska.

An NMFS spokesman said that the previous high penalty assessed against a foreign vessel for illegal fishing in U.S. waters was $250,000 levied against a Soviet trawler fishing off Alaska in February.

Industry Highlights

Foreign Trade, Market Trends Give Mixed Electronic View

Several important and interrelated points emerge from current study by the Office of Business Research and Analysis, Bureau of Domestic Commerce with regard to seven electronics-based industries. The U.S. itself represents a sizable, and in some cases, the largest single market in the world for these industries; U.S. firms are world leaders in many of these industries, with large percentages of world markets; and the U.S. international trade balance for these industries has exhibited fluctuating trends during the period from 1967 to 1972.

The U.S. market for electronic computing equipment (SIC Code 3573) amounted to about 60 percent of the total world market in 1970; for telephone and telegraph equipment (SIC 3661) it was 47 percent; commercial, industrial and military applications (SIC 3662) it was 46 percent; electronic components (SIC 3671 through 3679), 42 percent; consumer electronic products (SIC 3651), 38 percent; phonograph records and tapes (SIC 3652), 37 percent, and electrical measuring and testing items (SIC 3825), 30 percent.

During this five-year period, total U.S. imports of these seven industries jumped from $863 million to $3.1 billion, and imports' share of total U.S. consumption of these products rose from 3.6 percent to 10.8 percent. On the other side, U.S. exports in these areas increased from $1,545 million to $3.5 billion during this same period. The share of total domestic production being exported climbed from 6.2 percent to 12 percent.

The U.S. trade surplus corresponding to these areas actually grew from $682 million in 1967 to $1,133 million in 1970, but then fell to $392 million by 1972.

The data suggests that much of this decline can be traced to the explosion of imports in the consumer electronics area, which accounted for $1,993 million in imports compared to $231 million in exports during 1972.

Domestic output, consumption

A comparison of domestic production with apparent consumption of these industries shows that total domestic production increased 18 percent over the five-year period, while domestic consumption increased 20 percent.

Consumer electronics products was the sole industry among the seven in which domestic consumption consistently exceeded production.

Foreign penetration, as measured by imports as a percent of apparent consumption, was highest in the consumer electronics and components areas. In a broad sense, although foreign penetration has increased in the consumer electronics area by two-and-one-half times since 1967, the overall penetration of the entire group of industries has grown three-fold over the same period. In contrast, total U.S. exports as a percent of domestic output showed only a two-fold increase.

Many of the U.S. companies manufacturing products under these SIC codes are multinational in nature. One outgrowth of this has been the shifting to "offshore" facilities of all or selected portions of their production. In the late '60s, for example, management in many of the consumer electronics companies made decisions to capitalize on lower land and labor costs by moving final assembly of their products to areas such as Taiwan and Mexico. This has occurred in the other industries in this group as well.

Importation of products completed offshore but having some degree of U.S. content in materials is covered under the U.S. Tariff Schedule 806.3 and 807.

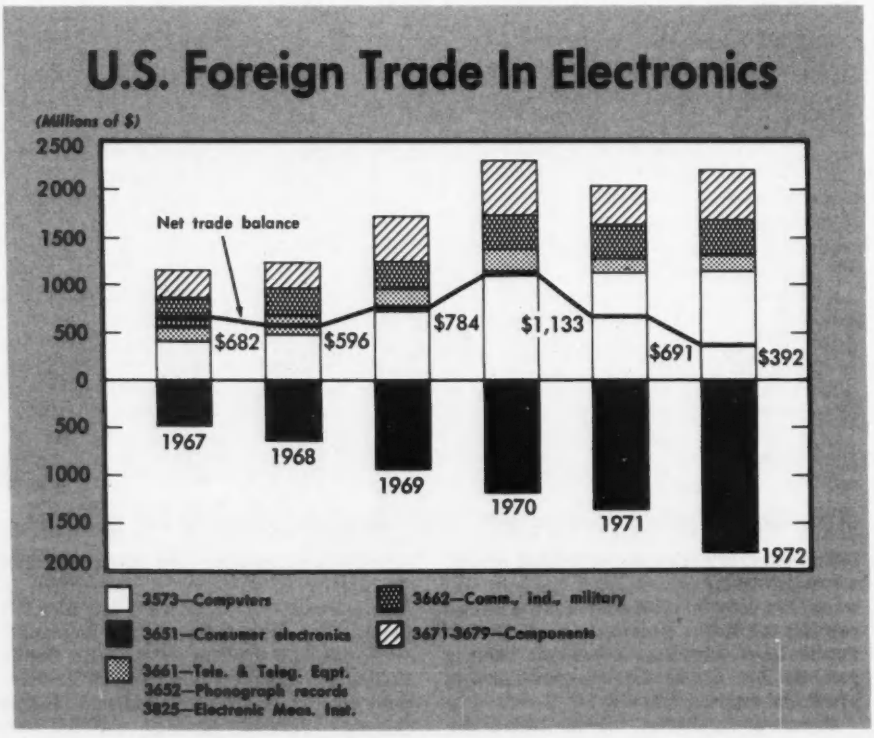
Item 806.3 allows articles of metal manufactured in the U.S., which are exported for further processing and then returned to the U.S. for further processing, to be charged a duty based upon the value of the processing performed outside the United States. Item 807 allows the same exemptions for finished products assembled outside the United States from U.S. components. The 806 area has remained relatively small compared to the 807, which is complex and fluid. Several notable patterns can be seen by examining import figures under section 807.

In terms of the dollar value of these product areas, 807 imports have only risen by four percentage points relative to total foreign imports during the 1970-72 period. The U.S. content of these 807 imports, however, has fallen by six percent over this same period.

The chief contributors to the growth of the 807 category have been the consumer electronics products and the electronic components areas. In both of these areas, companies have been shifting increasingly greater amounts of the production process to offshore facilities, thus avoiding climbing production in the U.S. The returning 807 imports, therefore, contain increasingly less U.S. content.

Multinational considerations

The multinational character of many of these industries adds a vital dimension to any consideration of domestic markets and international trade. For example, although electronic computers had impressive export growth rates through 1970, exports of these items leveled off through 1972. Yet it is estimated that in 1971, U.S. firms, their subsidiaries and licensees supplied about 90 percent of the estimated $7 to $8 billion western world market for computer equipment. Since 1970, computer equipment has



exhibited an extremely high growth rate in both 807 imports and the U.S. content of these imports. While total foreign imports of computer equipment grew from $60 million in 1970 to $174 million in 1972, 807 imports increased from $42 million to $128 million and U.S. content from $17 million to $64 million during the same period.

In the world market, U.S. component firms accounted for 47 percent of an estimated $12 billion in total shipments in 1972. On the domestic side, electronic components had the second highest penetration percentage in 1972. This area has also reflected a strong growth since 1967, with imports climbing from 2.5 percent to 9.8 percent of apparent consumption. The share of these total imports which entered under the 807 category fell from 46 percent in 1970 to 39 percent in 1972. Electronic components make up a particularly sensitive area since this industry is a fundamental supplier to all the other industries in the group.

Foreign penetration in consumer electronics has grown during these five years from 13.9 percent to 34.9 percent. In 1967 this area had a trade deficit of $464 million; by 1972 the deficit had grown to $1,762 million. The lack of compensating export growth by the other six industries failed to offset the effect of higher consumer electronic imports into the United States.

Energy Crisis Hits New Minority Firms Harder, Data Find

New enterprises are more vulnerable to energy shortages than other businesses, according to figures developed by Commerce's Office of Minority Business Enterprise.

"Like a young plant, young businesses need a little starting time to develop a root structure," pointed out OMBE Director Alex Armendaris. "This is particularly true of new minority enterprises, no matter how promising their performance."

"Their access to equity capital is limited, as their credit cushion is weak," the OMBE Director continued. "Supplier relationships are new and often tenuous. Special technical assistance and directed attention are thus of great importance to new businesses during energy shortages."

Small plastics firms, particularly minority companies, have been hard hit by energy problems, according to OMBE information. Difficulties in obtaining styrene, resin, and other petrochemical derivatives have exemplified the squeeze.

"OMBE is working through its local business development organizations to alert new entrepreneurs to the types of businesses affected. In addition," Armendaris said, "OMBE staff specialists are providing backup assistance to our local organizations dealing with specific shortage problems.

Dent Hails U.S. Industry's 'Good Start' In Saving Energy; Calls For Continuing Effort

Secretary of Commerce Frederick B. Dent warns the nation that it will continue to face high and "probably increasing" prices, not only for fuels "but also for the many goods whose prices are sensitive to the cost of energy."

Testifying before the Senate Commerce Committee, Secretary Dent said it was essential to keep the public and industrial community aware of the continuing need for energy conservation practices.

He also told the Committee that significant savings in the industrial sector will take time. Changes in industrial processes, modifications of plant and equipment require thoughtful study and analysis before the needed investments are made.

"The result, therefore, in the business community will not be a quick, one-time cut in energy demand, but rather a gradual reduction in long-term growth of energy use and an improvement in the output of goods and services for each unit of energy consumed," Dent pointed out.

Comparing the period of October 1973 through January 1974 with the same period a year earlier, Dent showed that industrial output increased 5 percent while industrial consumption of energy decreased about 1 percent. "On the basis of energy required per unit of industrial output," he added, "this represents a reduction of 4.8 percent." He called this "a good start" by the industrial community.

Noting that total business use of energy in the industrial, commercial and transportation sectors amounts to about 70 percent of the nation's energy consumption, Dent said that every industrial process has a theoretical minimum energy requirement—determined by examining the thermodynamic requirements of each process step and reviewing of current state-of-the-art technology.

"Work is under way to determine this theoretical minimum for nine major industrial groups that account for over 80 percent of industrial energy consumption.

High theoretical savings

"Previous estimates of some of our industrial processes indicate that theoretical savings on the order of 30 to 40 percent may be possible; but achieving these percentages would probably require major revisions to a large segment of America's manufacturing facilities. This would require very large investments by industry and could not be achieved overnight."

The Secretary said that the Commerce Department is planning technical assistance programs to insure that the necessary know how is available to all businesses, regardless of size.

"Finally, for those siutations where energy savings are available but cannot be realized for institutional or economic reasons, we are studying the need for federal action to remove the barriers involved," he explained.

Using computers

Dent also told the Committee that the Commerce Department's National Bureau of Standards is developing designs of new buildings with the aid of computers to improve their energy efficiency, and using a computer program to "retrofit" existing structures with such items as solar collectors, absorption air conditioning units, heat pumps, and a series of building shell improvements.

Among other Commerce Department programs, he also mentioned the Office of Telecommunications' studies whereby employees presently commuting downtown could perform their jobs within walking distance of their homes by using telecommunications links—such as video and audio conference techniques, facsimile and data terminals—with downtown departmental offices.

Denver Meeting To Assess State Of Air Pollution Drive

The status of the nation's fight against air pollution will be reviewed at the 67th annual Air Pollution Control Association meeting at Denver's Convention Center June 9-13.

After Environmental Protection Agency Administrator Russell E. Train's keynote address, conferees will be able to choose from among 47 three-hour sessions covering such topics as: emission control and environmental impact of power generation; waste disposal; implementing the Clean Air Act's compliance schedules; progress in the process industry and the surface coatings industry; environmental impact statements; health effects and ambient air standards; gas and odor control methods, and applications of new technology.

The meeting will also feature special programs for women and students, technical workshops, plant tours, air pollution exhibits, and a placement service.

For details, write Art Giffin, c/o Central Bank and Trust, P.O. Box 5548, Terminal Annex, Denver, Colo. 80217.

Scientists Seek Clean Mining Method For Ocean Minerals

Within a decade, commercial ships may be mining the mineral wealth from the floor of the Pacific Ocean, possibly with varied—and poorly understood—effects on marine life and environment. Scientists with the Commerce Department's National Oceanic and Atmospheric Administration, working with university colleagues, plan to launch a long-range project to determine what these effects will be, and how to minimize any potentially destructive impact on deep-sea ecology.

The project is planned to focus on an area of the deep ocean floor in the North Pacific where surface layers of high-grade manganese nodules have attracted the attention of the mining industry. These nodules contain copper, nickel, and cobalt, as well as manganese. Preliminary assays of the nodules in the North Pacific showed the metals in higher concentrations than some ores now being mined on land, and a number of corporations are considering mining them early in the next decade.

To evaluate the environmental impact of mining, the original condition of the waters, sea life, and bottom must be known. So the first step in the project is to establish baselines — exhaustive environmental descriptions of the pre-mining state of the water column and the top layer of sediment at selected sites in the nodule zone.

The first baseline study was conducted by a team of 14 oceanographers last month under a NOAA contract with the City College of New York. They focused primarily on the ocean floor, the bottom 1,600 feet (500 meters) and top 1,600 feet of the water column. The researchers scrutinized the living organisms, sediments, currents, and water chemistry at the bottom. Underwater television cameras scanned the seafloor, returning visual records of the amounts of nodules, the terrain, and fauna.

Industrial tests

The next step planned for the project, to be headed by John W. Padan of the Pacific Marine Environmental Laboratory in Seattle, is to monitor industrial tests and prototype mining operations. Two main types of mining systems are being developed: hydraulic systems, which act like overgrown vacuum cleaners to suck nodules to the surface; and the continuous line bucket system, which is simply a series of buckets strung like beads on a cable that drop from the mining vessel's prow, scrape along the ocean bottom and rise, laden with nodules, to the stern of the ship. Both systems are expected to destroy some deepwater organisms in their paths, stir up sediment, and bring bottom materials upward.

After such mining tests, NOAA would continue to observe the sites, to see whether the ecology returned to normal after mining operations ceased and how long the process required. Experiments in shore-based laboratories would help define the mechanisms by which mining could alter the environment.

As mineral resources on land are depleted, the mining industry is turning to the vast, untapped wealth of the sea. A number of corporations have already taken the preliminary steps toward recovering this wealth, and NOAA scientists estimate that full-scale commercial mining of manganese nodules will begin around 1980. "It is essential," notes Padan, "that the environmental impact of manganese nodule mining be well defined and its implications understood before deep-sea mining is attempted on a large scale."

Industry's Income Reflects Record U.S. Fish Consumption

Americans are eating more fish than at any time since the Federal Government began keeping records in 1909, and fishing industry income is at all-time record levels, according to figures from Commerce's National Oceanic and Atmospheric Administration.

The 1973 statistics indicate that the average per capita U.S. consumption of seafood was 12.6 pounds—an increase of slightly more than 2 percent, or three-tenths of a pound per person over the 1972 figure.

The data collected by NOAA's National Marine Fisheries Service indicate that total U.S. commercial fisheries landings (products used for both edible and industrial purposes) were worth a record $907.4 million to the country's fishermen. The total volume of approximately 4.7 billion pounds was almost the same as in 1972, but the value was up about 29 percent from the previous year because of higher prices paid at dockside. The 1973 average value per pound of 19.2 cents for all species also was a record high.

Total imports of fishery products reached a record high value of $1.57 billion, up from $1.49 billion a year earlier. Imports of edible fishery products were 4.7 billion pounds, up from 4.4 billion pounds in 1972. However, industrial fishery products imported by the United States declined sharply from 4.6 billion pounds to about 800 million pounds. The drop reflects the world shortage of fishmeal, especially the decline in production by Peru which suffered a severe failure in its anchovetta fishery.

The domestic shrimp fishery was the most valuable in the country. Landings of 372.2 million pounds worth $219.4 million represented a decline of 3 percent in volume but an increase of 14 percent in value compared with 1972. Shrimp accounted for 24 percent of the total dockside value of U.S. landings.

NFL Pros Finding Record Number Of Jobs For Kids

A team of 15 National Football League stars has lined up more than 500 career-oriented jobs for college-bound minority students over the past three months.

Working under an agreement between the Department of Commerce's Office of Minority Business Enterprise (OMBE) and the NFL, players from 15 teams are meeting with business leaders around the country to gain their participation in the Business Management Fellowship Program.

"A fellowship provides a minority student with career-related work experience," noted OMBE Director Alex Armendaris, "while it provides participating businesses with a management trainee for the duration of a student's college career."

Under the terms of the program, selected high school seniors are provided an opportunity of continued employment with a particular company throughout all vacation periods of their college years, and have employment prospects upon graduation. Compensation for work completed during summers and vacation periods during the four years of college is estimated at $7,500 per student.

Only students with financial need who have been accepted by an accredited college or university and who rank in the top 10 percent of their high school graduating class are eligible. The student must intend to major in a field of interest to the participating company.

"Many outstanding young students will have reason to thank these top athletes for a start to truly significant business careers," Armendaris said. "We believe we will exceed our 1974 goal of 1,000 Fellowships. We have already broken our 1973 record."

To meet the June sign-up deadline, 15 NFL/OMBE representatives are now actively coordinating activities with OMBE program officials to enlist sponsors from local business communities. Local businessmen interested in more information about the program are urged to contact the NFL/OMBE representative through Commerce District Offices in Atlanta, Cincinnati, Detroit, Kansas City, Los Angeles, Miami, New Orleans, New York, Philadelphia, Pittsburgh, St. Louis and San Francisco.

SCOUTING FOR OIL — *Ocean Scout, the first semi-submersible drilling rig to be built on the East Coast, is towed beneath the Chesapeake Bay Bridge before final assembly of its elevated drilling derrick. Ocean Scout is due for operation in the Gulf of Mexico.*

Atlantic Oil Searchers Need Rugged, Deeper-Drilling Rigs

Although offshore oil exploration is far from a new frontier, it is sparking a last frontier spirit in America's quest for energy resources to see the nation through this century and into an era of energy independence —an independence which must include clean, non-fossil fuel sources.

President Nixon has ordered the Interior Department to open more of the nation's coastal waters to drilling and set a goal of leasing 10 million acres in 1975.

Even the most optimistic pioneer does not expect the ocean's bottom to yield quantities of oil large enough to eliminate the need for Middle East oil. Too little is known about actual offshore possibilities. In fact, the Interior Department, in recently lowering its estimates of the nation's crude oil reserve, noted that any estimates are highly speculative because they are based on unknown factors. Not one hole, for example, has been drilled in the Atlantic.

Even so, geologists and industrialists and the rugged pioneers who tug the rigs out into the sea agree that if there are any big oil discoveries to be made in this country they lie beneath the oceans. And the zest with which oil companies are rushing to push explorations farther out to sea indicates enough is out there to make the frontier venture interesting. Record bids were made recently on oil drilling rights off the Louisiana coast in the Gulf of Mexico.

"The prospects for discovery of petroleum on the Outer Continental Shelf are still bright," Interior Secretary Rogers C. B. Morton said recently, "and they fully warrant continued investigation and exploration of this great frontier."

Hauling the giant oil rigs and complex drilling equipment farther into the ocean has caused a flourish of industrial activity in related fields. These include production of more sophisticated rigs designed to withstand the pressures of higher seas and drill deeper into the ocean bottom. Action is also perking up in auxiliary industries such as the offshore supply business, which includes helicopter tugs, tug boats, supply vessels and all gear needed to move the rigs and keep them operating.

The more than thirty offshore oil rigs now on the order books of major shipbuilders comprise a sizable portion of the shipbuilding industry's current production activity.

Bethlehem Steel, Marathon-LeTorneau and Avondale are the major shipyards that build the offshore rigs.

Probably the most popular design today is the semisubmersible rig—touted for its performance in deep water, where its hulls give the platform stability.

First on East Coast

The Ocean Scout, first semisubmersible to be constructed on the East Coast, is an example of the complexity that goes into the design of this generation of offshore oil rigs. Built at Bethlehem's Fort McHenry Shipyard and towed to a site below the Chesapeake Bay bridges where final sections of the drilling derrick were erected, the Ocean Scout was delivered recently to Ocean Drilling & Exploration Co. of New Orleans. It will be operated in the Gulf of Mexico by Pennzoil Co.

Designed to be a mobile offshore drilling unit suitable for unrestricted ocean service, it has a lower hull length of 202 feet and width of 182 feet.

The operational draft will be 48 feet in depth of water from 80 to 600 feet. Towing is done with wire towing hawsers.

It will be moored by eight 30,000 pound anchors each with 2,500 feet of 2½ inch diameter stud link anchor chain. It can drill a hole in excess of 20,000 feet.

Another popular offshore rigging model with extremely high versatility in deeper water is the mobile drilling platform—the drill ship. One version is simply a ship with drilling equipment in a center hatch. Another version floats on twin hulls when in a transport position. It is readily towed and has high stability in the drilling position.

The submersible rig is used for operations in shallow water. It sits firmly on the ocean bottom.

Versions of the jack-up type are preferred for medium depths. The jack-ups are positioned on long steel legs and elevated to the desired height above the water. Some have self-elevating mechanisms.

Output rising

In this area, a Commerce Department survey estimates that production of oilfield rigs capable of drilling more than 18,000 feet is expected to rise from 54 in 1973 to 91 in 1975, an increase of 69 percent.

The estimate is based on a survey of the eight U.S. producers of oilfield drilling rigs, six of whom produce rigs that drill more than 18,000 feet. Production of the smaller rigs is expected to rise 45 percent to a total of 77 in 1975.

An oilfield rig includes mast, draw works, crown block, swivel, rotary table, blow out preventers, power unit, mud pumps, clutches, and wire line.

During the 12 months ending in April 1974, companies surveyed shipped a total of 54 offshore rigs with 11 in the 10,001-to-18,000 feet size and 43 in the 18,001-feet-and-over size. A total of 48 land rigs was shipped with 39 in the 10,001-to-18,000-feet size and 9 in the 18,001 feet and over range. None of the rigs in the larger size and less than 5 in the 10,001-18,000 feet range were considered interchangeable.

In the 18 months starting April 1974, companies surveyed expect to ship a total of 133 offshore rigs; 34 in the 10,0001 to 18,000-feet size and 99 in the 18,001-feet-and-over size. In the same period, 89 land rigs are expected to be shipped; 77 in the 10,001 to 18,000 feet size and 12 in the larger size.

Companies surveyed indicated that long lead times of from 6 to 18 months in obtaining raw materials and equipment were delaying the completion of some rigs.

Additional new rigs will be constructed in the field by assembling parts manufactured by these 8 companies as well as by other oilfield equipment manufacturers. One company estimates that during the next 18 months between 12 and 18 additional rigs will be constructed in this manner.

Special Districts In Growth Trend; Provide Services Other Units Can't

The number of local government units known as special districts increased from 21,264 to 23,885 between the 1967 and 1972 Censuses of Governments.

The Census Bureau says the 12.3 percent increase reflects public demand for specialized services that aren't offered by existing general purpose governments. The establishment of special districts allows a greater degree of specialization in providing services, since most special districts perform only one or a limited number of functions.

Special districts also eliminate the need to increase the expense of local general purpose governments, which can't provide the needed service with their current revenues. Debt and tax rate limitations applicable to counties and municipalities further stimulate the creation of special districts.

They are the most diverse group of local governments in the nation, providing such basic needs as hospitals and fire protection, but also such services as mosquito abatement, soil conservation, drainage, irrigation, flood control, water, electricity, gas, transit, housing and urban renewal, cemeteries, sewerage, education, parks and recreation, highways, and libraries. In the past 10 years, while the total of local governments has been decreasing, the number of special districts has increased considerably.

Type	1972	1967	1962
Total local gov'ts	78,218	81,248	91,186
County	3,044	3,049	3,043
Municipal	18,517	18,048	18,000
Township	16,991	17,105	17,142
Sch. dist.	15,781	21,782	34,678
Spec. dist.	23,885	21,264	18,323

Special districts differ vastly from other local governments in their sources of revenue. For example, although property taxes account for about 36 percent of total revenues of other local governments, only about 14 percent of special district revenue was accounted for by this source. Only about 49 percent of all special districts are authorized to levy property taxes, and most rely on direct charges for services they provide as their main revenue source.

Approximately 23 percent of all special district funds in fiscal 1971-72 was utility revenue, such as gross receipts from sales by water supply, electric power, transit, and gas supply systems. Aside from these revenues and revenues from constributions of employees to retirement systems administered by special districts the remainder of the $6.8 billion total was general revenue.

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Figures Indicate Bright Future For Travel Industry

The travel industry faces a bright future in the years just ahead if trends noted by the Census Bureau prevail. Projections indicate that in the next few years an increasing percentage of the population will have the characteristics which favor traveling, based on information from the Bureau's 1972 National Travel Survey.

Most of the nation's travelers are in the prime economic years from 25 to 64, and this age group accounts for 60 percent of the travelers but only 44 percent of the total population. By 1985 this age group will comprise nearly half the population.

Travelers also tend to have more schooling than non-travelers. The National Travel Survey found that travelers are twice as likely to have completed some years of college than the general population—45 percent of the travelers compared with only 22 percent of the total population.

Because educational levels are expected to continue rising, simple logic indicates that travel will increase.

Another major influence on travel is occupation. The National Travel Survey showed that, in 1972, 45 percent of the nation's travelers were from households where the head is a professional or managerial worker. But only 30 percent of all employed household heads held such jobs.

Employment in the professional field is expected to grow faster than any other major occupational group, according to Bureau of Labor Statistics projections. By 1985 professional employment should be about one and one-half times greater than the annual rate of employment increase projected for all occupations.

U.S. Chlorine Shipments To Rise By 9% For 1974

U.S. shipments of chlorine for use in water treatment are expected to rise 9.2 percent to 547,000 short tons in 1974, according to a Commerce Department survey of prime producers representing more than 95 percent of the country's productive capacity. Shipments of 501,000 short tons during 1973 were 16.7 percent above the 1972 level.

The survey also indicated that of 1973 shipments of chlorine for water treatment, 23.8 percent went directly from prime producers to municipalities and 76.2 percent went to chlorine "repackagers" or distributors who serve both municipal and industrial accounts. Repackagers, in turn, ship about 25 percent of their product to industrial accounts and about 75 percent to municipal accounts.

Municipal use of chlorine includes purification of drinking water, as well as sanitation of sewage effluent and swimming pools. Industrial customers of repackagers use chlorine for sanitation of food-processing facilities and industrial waste effluent streams and related purposes.

Calendar For Businessmen

June 9-13—Denver, Colo.—67th annual Air Pollution Control Association Conference featuring exhibition of air and noise pollution abatement equipment, instrument accessories, and their related services. For information, Air Pollution Control Association, 440 Fifth Ave., Pittsburgh, Pa. 15213.

June 16-18—Washington—National Coal Association 57th annual convention at Statler Hilton.

June 16-18 — Washington — Conference on management, marketing and sales, Mayflower Hotel. Sponsors: Washington Economic Co., OMBE Regional Office.

Consumer Products With Good Sales Potential Identified In 20-Country Market Survey

Commercial Officers at 20 U.S. Foreign Service posts recently surveyed their respective markets for consumer goods to determine sales potentials. Such products, accounting for about $4 billion worth of U.S. exports, have become more competitive as a result of widespread changes in currency valuations.

Through interviews with department and chain store executives and importers, results of U.S. trade promotion events, prior research studies, and import and market share statistics, the Commercial Officers appraised the general climate for U.S. consumer goods in the 20 countries and evaluated the export prospects for products in 11 specific categories and one miscellaneous grouping.

The reports have just been published by Commerce's Bureau of International Commerce in a 144-page compilation, "Markets Abroad for U.S. Consumer Goods."

Countries covered in the study are Argentina, Australia, Belgium, Brazil, France, Germany, Hong Kong, Iran, Israel, Italy, Japan, Malaysia, Mexico, the Netherlands, Republic of China, Spain, Switzerland, Sweden, United Kingdom, and Venezuela.

The product categories are:

Perfumes, toiletries and cosmetics, including skin creams and lotions, makeup, soaps, dental preparations and deodorants; **textile products,** including bathmats and towels, lingerie, infants' clothing, women's outerwear and men's shirts; **costume and precious jewelry; medical and pharmaceutical supplies, for retail sale,** including antibiotics, tranquilizers, hormone preparations and preparations for treating circulatory disorders.

In addition, **domestic appliances and housewares,** including refrigerators, air conditioners, dishwashers and television sets; **transportation equipment,** including small aircraft, automobiles and pleasure boats.

Also, **photographic equipment and supplies,** including amateur motion picture and still cameras, film and photo developing equipment; **sound and video recording and reproducing equipment,** including video tape recorders, magnetic recording tapes and phonograph records.

Also, **musical instruments,** including electric guitars and organs; **printed matter,** including paperback fiction, magazines and political, economic and scientific treatises; **sporting goods, toys and games;** and **miscellaneous products,** such as hand tools, stationery, glassware and hunting ammunition.

Commenting on the new study, Deputy Assistant Secretary of Commerce Marinus van Gessel said:

"As other countries develop increasing skills in the production of highly sophisticated capital goods, and as the U.S. market share for these products is continuously shrinking, it has become increasingly important to seek additional product areas in which U.S. industry can penetrate foreign markets.

"Consumer goods, which already account for approximately $4 billion of our exports, and which are now more competitive than before because of the dollar devaluation, seem to offer such an opportunity."

"Markets Abroad for U.S. Consumer Goods" is available at $3 a copy from the National Technical Information Service, Sales and Distribution, Room 1605, U.S. Department of Commerce, Washington, D.C. 20230. The study also may be reviewed in any Commerce District Office.

Copies of Foreign Service post communications mentioned in the study are available on loan from the Foreign Market Report Unit, Room 1033, U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C. 20230.

PROMOTION, TOO—*The Commerce Department, in addition to surveying markets for consumer goods, also has been promoting such exports. Above, recent in-store display, sponsored jointly by Commerce and Seibu Department Store in Tokyo (see* Commerce Today, *Jan. 7, for details of program). Next such event is scheduled for Tokyu Department Store, Tokyo, in November, for which the store has purchased $500,000 worth of consumer products f.o.b. U.S.*

Joint U.S.-Soviet Commercial Unit Recommends Pact

Conclusion of a long-term agreement to facilitate economic, industrial and technical cooperation between the two nations was recommended by the Joint U.S.-USSR Commercial Commission at its Fourth Session in Washington May 21-22.

The Commission, which anticipates two-way trade between the U.S. and the Soviet Union will exceed $1 billion this year, discussed the current status of projects in the fields of fertilizer production, gas and oil exploration, timber products, machine building facilities and products of power-consuming industries.

Soviet interest in power-consuming production facilities, including aluminum, ferro-manganese and ferro-chromium, and chemicals, has been referred by the Commerce Department to U.S. trade associations and in some cases to specific U.S. firms, it was noted. The Soviets provided the U.S. delegation additional data on several projects for transmittal to U.S. firms.

Agreement was reached, it was stated in the closing communique, on expansion of commercial representation and on the need to facilitate suitable office, housing and working conditions. A recent commitment by the U.S. Eximbank to furnish credit for export of U.S. equipment, materials and services for the construction in Moscow of an International Center for Commerce was noted. Currently, it was noted, 17 U.S. companies and banks have already been authorized to open offices in Moscow.

The U.S. Commercial Office, just opened in Moscow, will hold its first event July 8-12. It will be an exhibition and technical seminar by six U.S. firms in the industrial production quality control field: Capital Controls, IRCON, LECO, Beckman Instruments, Hewlett-Packard, and Varian.

The office, at 15 Chaykovskovo Street, is under the direction of Tom Niles, with James L. Blow as deputy director. Its telephone number is 255 48 48.

The U.S. delegation reaffirmed the Administration's determination to obtain legislation that would provide authority for Most-Favored-Nation tariff treatment for Soviet exports to the U.S. Such a provision is part of the Administration's Trade Reform Act now being considered by Congress.

The session was chaired by Treasury Secretary William E. Simon. Other U.S. members included Commerce Secretary Frederick B. Dent and Acting Deputy Assistant Secretary of Commerce for East-West Trade Lewis W. Bowden. Acting Minister of Foreign Trade Mikhail R. Kuzmin led the Soviet delegation.

JOINT COMMERCIAL COMMISSION LEADERS — *At the Fourth Session of the Joint U.S.-USSR Commercial Commission in Washington, Treasury Secretary William E. Simon (left), who heads the U.S. delegation, greets the Soviet leader, Acting Foreign Trade Minister Mikhail R. Kuzmin. Treasury Under Secretary Jack F. Bennett is at rear.*

First Assessment Of DISC: It Has 'Positive' Export Impact

First returns are now in on the export-incentive program called DISC, and although the reporting Treasury Department terms them "very tentative" it concludes that the program has already had a positive impact on U.S. exports.

DISC stands for Domestic International Sales Corporation, an enterprise that can qualify to have half of its Federal taxes deferred on eligible export income. The DISC legislation, enacted in 1971, was aimed at increasing U.S. exports by providing tax treatment for U.S. exporters similar to that enjoyed by their foreign competitors.

In its first report to Congress on the operation and effect of the DISC program, the Treasury Department tabulated returns from 2,249 DISCs for tax years ending March 31, 1973.

The returns indicate total DISC income of roughly $1,200 million and total DISC exports of roughly $16 billion.

The leading DISC exports were concentrated in five product groups which accounted for two-thirds of the total: agricultural products, $1.1 billion, or 7.2 percent; chemical products, $1.3 billion, or 8.1 percent; nonelectrical machinery, $2.4 billion, or 15.5 percent; electrical machinery, $1.2 billion, or 7.6 percent, and transportation equipment, $4.4 billion, or 28 percent.

The loss of revenue to the U.S. Treasury for the period that ended on March 31, 1973, is estimated at about $250 million. This figure does not include offsetting gains in tax revenue from higher wages and supplier income attributable to expanded exports.

In assessing the impact of DISC operation on total U.S. exports, Treasury officials note that it is difficult to separate the influence of devaluation, price controls and other factors that affected U.S. exports in 1972.

But a comparison is made between the export growth rates of firms with DISCs and those without them, in the years 1971 and 1972. Since only 166 of the 2,249 reporting DISCs gave the value of their corporate group exports for 1971, the comparison is labeled by the officials at Treasury as "highly tentative."

The 166 firms supplying the comparison accounted for $9 billion out of total U.S. exports of $49 billion in 1972. The exports of these firms, as a group, grew 14.1 percent between 1971 and 1972, as compared with an overall export rate for the nation of 12.4 percent. However, when a weighted average is applied to the export increase of these firms to reflect their relative importance to total DISC exports on an industry-by-industry basis, the growth rate was about 29 percent.

NAM June Roundtable To Study U.S. Trade Issues

The major trade issues facing U.S. business now, including worldwide negotiations, monetary stabilization, East-West relations and multinational corporation developments will be examined at a roundtable meeting in Washington June 11-12 sponsored by the National Association of Manufacturers.

Among the speakers will be Fletcher Byrom, chairman of the Koppers Co., Pittsburgh, who is also chairman of the recently-established President's Export Council.

The meeting, being organized by the NAM's International Economic Affairs Department, is open to members and non-members. For registration information write: National Assn. of Manufacturers, 1776 F St., N.W., Washington, D.C. 20006.

Washington's

Official Trade Briefs

This article is another in a series of reports outlining actions by domestic, foreign, or international agencies affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Staff's Office of International Trade Policy.

THE CONGRESS

Committee Action—Senate: The Senate vacated its action taken on April 23, when it passed S. 1486, authorizing the Secretary of Commerce to engage in export expansion activities; and, by unanimous consent, that bill and S. 1485, to establish an International Commerce Service within the Department of Commerce, were referred to the Committee on Foreign Relations with instructions that they be reported to the Senate not later than 30 days from April 24.

The Senate Committee on Finance has authorized release of a report on trade barriers prepared by the Tariff Commission at the request of the Committee. The four-part report is the result of a major research project by the Commission undertaken to examine the diverse practices by governments and private organizations that constitute world trade barriers. The report analyzes the tariff and nontariff barriers maintained by the world's principal trading nations, and also compares the tariff concessions granted pursuant to international trade agreements to which the United States is a party.

The Subcommittee on International Finance of the Senate Committee on Banking, Housing and Urban Affairs has begun open markup of S. 3282, to amend and extend authority for regulation of exports.

Committee Hearings—The Subcommittee on International Trade of the House Committee on Banking and Currency has been conducting hearings on H.R. 13840, Export Administration Act Amendments of 1974. Secretary of Commerce Frederick B. Dent testified before the Committee May 1.

The Subcommittee on Foreign Economic Policy of the House Committee on Foreign Affairs began hearings on global scarcities in an interdependent world.

Bills Passed: On May 7, the House passed H.R. 6191, to amend the Tariff Schedules of the United States to provide that certain forms of zinc be admitted free of duty; H.R. 11251, to amend the TSUS to provide for duty-free entry of methanol imported for use as fuel; H.R. 11452, to correct an anomaly in the rate of duty applicable to crude feathers and downs; and H.R. 12035, to suspend for one year the duty on certain carboxymethyl cellulose salts.

Bills Reported: The Senate Finance Committee reported favorably H.R. 8217, exempting from import duty certain foreign equipment and repairs for vessels operated by or for any agency of the United States where entry was made in connection with vessels arriving before Jan. 5, 1971.

New Legislation: Since the opening of the 93rd Congress, some 600 trade and related bills have been introduced. Legislation not previously reported in the Trade Briefs column includes S. 3410, to enable the United States to insure an adequate supply of food for its citizens, while providing food to foreign countries for humanitarian purposes, by establishing a Federal Food Reserve for certain designated commodities and by establishing controls on exports of such commodities; S. 3448, to amend the Tariff Act of 1930 to permit the informal entry of merchandise not exceeding $500 in value.

Also, H.R. 14276, to amend the Export-Import Bank Act of 1945 to strengthen the oversight role of Congress with respect to extension of credit by the Bank, and for other purposes; H.R. 14413, to amend the Bretton Woods Agreements Act to establish the National Advisory Council on International Monetary and Financial Policies, and for other purposes; H.R. 14545, to amend the Sugar Act of 1948 to retain an overall external quota system while abandoning quotas for specific countries, to eliminate the internal quota system, and for other purposes; H.R. 14561, to authorize provision of assistance to foreign countries in exchange for strategic or critical raw materials; H.R. 14624, to eliminate temporary duties on bleached hardwood kraft pulp; and H.R. 14626, to repeal economic sanctions against Cuba which are contained in certain acts of Congress.

TARIFF COMMISSION

Reports—The Commission reported to the President that consumption of knives, forks, and spoons with stainless steel handles amounted to 51,363,141 dozen pieces in 1973. The report is the third in a series of required annual reports.

The Commission reported to the President that both domestic shipments and imports of earthen table and kitchen articles decreased in 1973 as compared with 1972. Shipments of such articles by domestic producers were 11 percent smaller in 1973 than in 1972, and imports were 10 percent smaller. The imports of earthen table and kitchen articles supplied 58 percent of apparent U.S. consumption of such articles in 1973, the same as in 1972. Imports dutiable at the escape-action rates accounted for a third of total imports in May-December 1973, compared with almost half in the corresponding period of 1973.

Adjustment Assistance — Workers: The Commission found that former workers of Clippard Instrument, Inc., Paris, Tenn. (**coils**) meet the requirements of the Trade Expansion Act (TEA) of 1962 to apply to the Department of Labor for adjustment assistance.

On its vote concerning the eligibility of the workers of Sbicca of California, Inc., South El Monte, Calif. (**footwear for women**), the Commission was equally divided. The President makes the final decision and may consider the findings of either side as the Commission's finding on evenly divided cases.

The Commission found that the following petitioning groups of workers do not meet the requirements of the TEA of 1962 for applying to the Department of Labor for adjustment assistance: workers of Roxbury Carpet Co., Chattanooga, Tenn., subsidiary of Carson Pirie, Scott & Co., Chicago (**woven velvet carpets**); workers of Sun-Cal Footwear Inc., Gardena, Calif., a wholly owned subsidiary of Lehigh Moccasin Corp., a wholly owned subsidiary of Lehigh Valley Industries, Inc., New York (**footwear for women**); workers of Dolly Novelty Shoe Co., Inc., Clifton, N.J. (**footwear**); workers of Cranbar Corp., Ponce, Puerto Rico, a wholly-owned subsidiary of Uniroyal, Inc., New York (**footwear**); workers of Dee-Vee Footwear, Inc., Bridgeport, Conn. (**footwear for women**).

Adjustment Assistance—Firms—The Commission found that Herr Manufacturing Co., Inc., Tonawanda, N.Y. (**textile machinery parts**) does not meet the requirements of the TEA of 1962 to apply for adjustment assistance.

Section 337 (Unfair Import Competition) Cases: A complaint was filed with the Commission on behalf of Johnson Products, Inc., of Muskegon, Mich., alleging unfair methods of competition and unfair acts in the importation and sale of certain **hydraulic tappets.** Welles Manufacturing Corp., PKC Co., and Power Industries, Inc., each located in Northvale, N.J. have been named as importers and distributors of the subject products. The Commission has initiated an investigation into the issues raised in the complaint and will hold public hearings on June 10 at the Tariff Commission Building in Washington, D.C.

Investigations—Workers: On the basis of a petition filed under section 301(c)(2) of the TEA of 1962, the Commission has opened an investigation on the effects of imports on behalf of workers and former workers of the Woodbridge, N.J., plant of the RCA Corp., New York (**electronic receiving tubes and components thereof**).

Dumping Cases: The Commission notified the Secretary of the Treasury that an industry in the United States is being injured or is likely to be injured by reason of imports from Mexico of **picker sticks** which are being

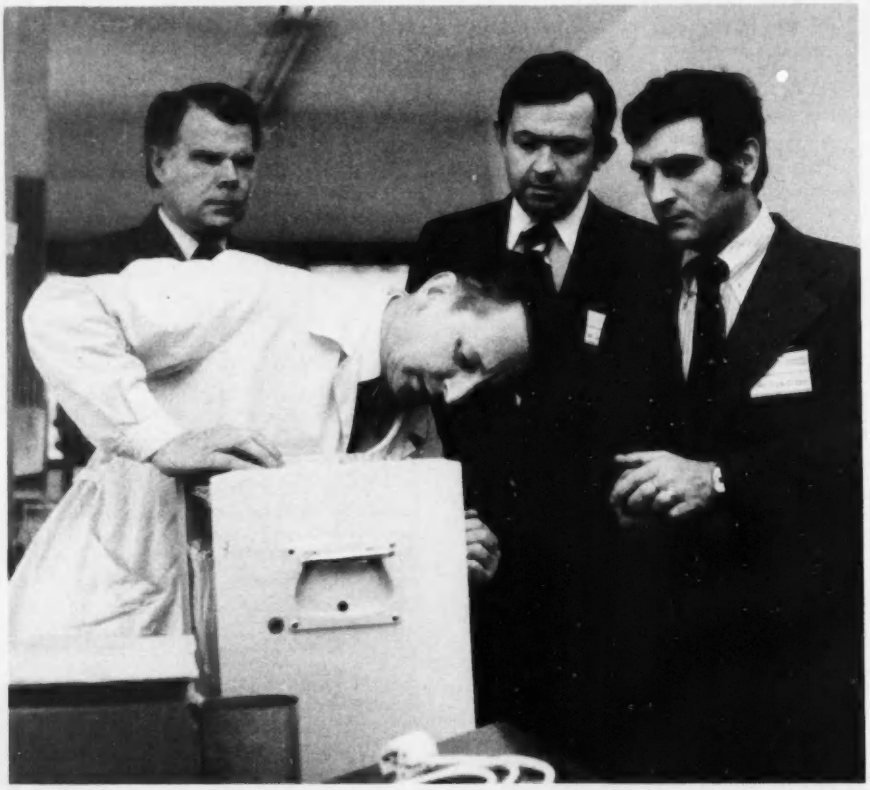
or are likely to be sold at less than fair value (LTFV). As a result of the Commission's finding, these imports will be subject to special dumping duties.

The Commission also notified the Secretary of Treasury that an industry in the United States is not being or is not likely to be injured or is not prevented from being established, by reason of imports from Japan of **hand-operated plastic pistol-grip liquid sprayers** sold at LTFV. Special dumping duties will not be imposed.

OTHER AGENCIES

Treasury—Dumping Cases: The Secretary of the Treasury announced that the Department is publishing findings of dumping with respect to **primary lead metal** from Australia and Canada.

Labor—Adjustment Assistance: Approximately 110 former employees of Fred Braun Workshops, Inc., New York City (**footwear for women**) have been certified by the Labor Department as eligible to apply for trade adjustment assistance. The workers lost their jobs as a result of increased imports.



U.S. VISITORS—*At Radelkis Industrial Cooperative, Budapest, U.S. Ambassador Richard F. Pedersen (left), Mission Executive Officer James A. Treichel, and Mission Director Frank G. Zarb observe a Hungarian technician at work.*

FROM CITY TO FARM — *At Ambassador's reception (top), Zarb (left) greets Hungary's Deputy Prime Minister, Istvan Huszar. Below (from left), during farm tour, Zarb, Treichel, and Mission Deputy Director Guy Chamberlin talk with Robert Burgert, Director of Babolna State Farm.*

Top Executives Of U.S. Companies Visit Hungary, See Expanded Trade Ahead

Top management representatives of eight major U.S. corporations recently explored with Hungarian trade officials steps to increase trade. The discussions were part of an "executive-level mission" sponsored by the Commerce Department's Bureau of East-West Trade and led by Frank G. Zarb, Associate Director of the Office of Management and Budget.

Zarb said that the visit enabled the mission to have a much clearer picture of the Hungarian economy and its lines of development. Based on this information, the executives were able to cover a wide range of long-term possibilities with high Hungarian government officials and company managers. "In a number of concrete areas," Zarb noted, "we succeeded in laying the foundations for future success."

Zarb met with President Pal Losonczi, Deputy Prime Minister Istvan Huszar, Minister of Foreign Trade Jozsef Biro, Minister of Agriculture Imre Dimeny, Minister of Finance Lajos Faluvegi, and President Odon Kallos of the Chamber of Commerce as well as other representatives of government and business.

In all these meetings with Hungarian leaders, Zarb expressed the desire of U.S. Government and business to find ways to expand and improve trade relations and found a similar positive attitude on the Hungarian side.

Visit factories, farms

Zarb visited the Babolna State Farm, the Gyor Wagon and Machine Works, and the Radelkis Industrial Cooperative, all of which have developed extensive relationships with a number of U.S. firms. In addition, most of the company executives on the mission visited factories within their areas of interest.

The eight companies which participated in the mission were: FMC Corporation, Pfizer, J. I. Case, Sperry-Univac, ITT, Union Carbide, Universal Oil Products, and Ingersoll-Rand. Commerce was represented by Deputy Assistant Secretary Guy Chamberlin, Jr., who acted as Mission Deputy Director, and James A. Treichel, Bureau of East-West Trade, who was executive officer of the mission.

Power Gap In India, Pakistan Spurs Need For Equipment

India and Pakistan, like many other countries, are finding demands for power outstripping existing capabilities.

An on-scene impression of the resultant market for electric generating, transmission, and distribution equipment was outlined recently by a U.S. trade mission—after talking with officials of Government Ministries and industry leaders in both countries and observing facilities for manufacturing such equipment. The six-member mission visited Bombay, New Delhi, and Bhopal in India; and Lahore, Karachi, and Islamabad in Pakistan. In Bhopal, the U.S. businessmen toured the Bharat Heavy Electrical Ltd.; and in Karachi, the Korangi Thermal Power Station.

"Demand for power in these countries is staggering, and India particularly is bordering on a national crisis," Mission Director Don R. Henderson of the Commerce Department observed. The country's resources for expanding production to meet stated equipment needs is limited, he said. "Assuming that food imports do not seriously deplete foreign exchange reserves, India's import market for power equipment during the next five years could reach $170 million a year—a level that is substantially higher than at any time in the past several years."

To meet such heavy requirements, said Henderson, the Indian Government will look for sources of supply that offer the most favorable financing and involve the least drain on scarce foreign exchange reserves. At the same time, however, the Government will attach considerable importance to quality and early delivery schedules.

A dramatic increase in the U.S. share of the Indian market, according to the mission consensus, will depend on how aggressively and imaginatively U.S. companies are able to sell in an environment in which the accessibility of concessional financing and favorable credit terms remains one of the most attractive selling points.

Incremental sales in the Indian market are dependent largely on provision of such financing through the Export-Import Bank or other financial institutions. Keen attention should be paid by U.S. companies to the availability of credits from the International Development Association and other multilateral lending agencies as the prime source for financing U.S. exports to India.

Pakistan's import plans

The U.S. group learned in Pakistan that if necessary foreign exchange can be secured, the country plans to import $300 million worth of electric power equipment between now and June 1976. Principal components of this import package will be equipment related to electric power generation, high-tension and extra-high-tension transmission lines, grid stations and power distribution.

Although U.S. products are generally considered price competitive and of high quality, it is difficult to predict the U.S. share of the future market, Henderson said, for this market usually—though less so than India's—is dependent upon concessional loans from foreign governments and major international lending bodies. The mission was informed by Pakistan industry and government leaders that they would welcome U.S. technical, managerial, and equity capital participation in development of the nation's small but under-utilized sector that manufactures electrical power equipment.

Although it is yet too early fully to assess the tangible results of the mission's visit in terms of actual business generated, the director reported that orders in excess of $5.5 million are expected within the next 12 months. More significant perhaps, in terms of short-term objectives, were the three agency representation agreements signed during the visit, and the possibilities of successfully concluding five licensing and joint venture agreements within the ensuing 12-months.

Mission members from U.S. business, and the firms they represented, were: G. Bryce Bennett, International Engineering Co., San Francisco; M. Rolland Gillett, Pengo Division, Gearhart Owen Industries, Inc., Fort Worth, Tex.; William I. Maclean, Garrett Corp., Los Angeles; Donald J. Mazanec, Joslyn Manufacturing & Supply Co., Chicago; James I. Wells, Alco Engines Division, White Industrial Power, Inc., Auburn, N.Y.; and a resident representative of First National City Bank in each city visited.

CONFERRING WITH LEADERS—*In Bombay (above), Mission Director Don Henderson (center) talked with Harrish Mahindra (left), President of the Indo American Chamber of Commerce, and Naval Tata, industrialist. In lower photo, as mission members met in Lahore with officials of the Government of the Punjab, Dr. Mushtaq Hussain (second from bottom, right) of the Planning and Development Board was "in the chair."*

Trade Fairs, Centers

Mexicans View U.S. Chemical Equipment At Trade Center; Floor Sales Result

Mexico, a country rich in natural resources, got its first good look at a display of U.S. chemical and petrochemical equipment recently during a U.S. Trade Center exhibition in Mexico City. The show resulted in many on-the-spot sales, as well as many first contacts, which will lead to orders for the 38 companies exhibiting.

Floor sales totaled $255,000; projected sales for the next year add up to $8.1 million, of which $1.8 million are for companies new to the market. Products mentioned often as being the most interesting were engine performance and maintenance analyzers, engine protection systems, rotary pumps and drying equipment. Eight hundred forty-one businessmen, representing 584 Mexican companies, attended.

Expansion plans cited

The show's opening press conference featured the President of the Mexican Institute of Petrochemical Engineers, Jose Luis Oria. He noted that Mexico's chemical and petrochemical industry was of major importance to the economy and underscored the sizable expansion plans in this area. The industry has been facing capacity limitation, and with the latest problems concerning a still more severe shortage of raw materials, vast improvement plans have been announced by both the private and public sectors. During 1974-76, these investments are expected to be just below the one billion dollar mark. Undoubtedly, U.S. suppliers will benefit from these investment plans—considering the reputation for quality that U.S. equipment has in the local market, evidenced by the high percentage of the import market American equipment manufacturers hold.

"This show proved to be a terrific launching pad for our products," said Ricardo Paz, of Beta Engine Systems Corp. "The ground work was well laid for us here and it looks as if the contacts are going to prove profitable for us."

The show drew not only Mexico City businessmen, but important potential clients from Monterrey, Guadalajara, Puebla, and other important industrial cities throughout the country.

EDP Promotion In Stockholm: Results Exceed Expectations

The 140 people attending the Incoterm Corp.'s between-show promotion of programmable display terminals, batch terminals, and remote peripherals at the Stockholm Trade Center last month represented an impressive list of individuals from Denmark, Germany, and Norway, as well as Sweden.

The most important retail establishments, transportation and insurance companies, banks, and governmental/municipal agencies from all parts of Sweden were represented. Eril Bendz, managing director of Vaxjo Data System, Incoterm's agent in Sweden, stated that the promotion exceeded his most optimistic expectations.

The turnout was impressive, with regard to both the number and the caliber of the visitors—more than 50 percent were decision makers. Off-the-floor sales are reported at $200,000, and $2 million in sales are projected for the coming 12 months. This promotional event provided a good example of the regional draw of the Stockholm Trade Center.

U.S. CHEMICAL EQUIPMENT — *At Trade Center show in Mexico City (upper left photo), exhibitor Scott Olin (left) points out advantages of his company's products to potential customer. In photo left above, Thomas C. Ficken (right) explains his firm's liquid measuring equipment. In photo on right, Ricardo Paz (left) describes how Beta's balancing equipment works.*

Sales Reach $9.4 Million At Industrial Equipment Exhibition In Taiwan

American Products for Industry—AMPRO '74, an exhibition of equipment in a variety of major industrial categories, recently drew some 73,000 business visitors in Taipei and led to $9.4 million worth of floor sales by the participating U.S. firms. The show's success reflects the growing opportunities for U.S. companies that are alert to the changing trade patterns developing in the burgeoning economy of the Republic of China.

AMPRO '74 was sponsored by the Ministry of Economic Affairs, with cooperation and administrative support from the U.S. Department of Commerce. Products displayed included machinery and equipment related to construction and road building, electronics production and testing, food processing and commercial refrigeration, metalworking, packaging and materials handling, textile and garment production, and scientific, medical and laboratory requirements.

The Republic of China's Premier Chiang Ching-Kuo, along with U.S. Ambassador Walter P. McConaughy, Minister of Economic Affairs Y. S. Sun, and Deputy Assistant Secretary of Commerce Marinus van Gessel inaugurated the exhibition.

The 88 exhibitors forecast sales of $30.6 million during the next 12 months. Twenty-seven of the exhibitors, who were either new-to-market or new-to-export, anticipate at least $3.5 million in sales to Taiwan during the next year stemming from the business contacts they established during AMPRO '74. In addition, 12 exhibitors signed representation and licensing agreements.

Excellent market exposure

Exhibitors were primarily interested in product exposure to new business prospects or immediate sales. One new-to-market firm, Pacific Exports, Inc. of Honolulu, which displayed water purification equipment, signed up three agents, made immediate sales of $290,000, and projected sales of $2 million during the next 12 months. Another exhibitor who considered the show a huge success said, "it will require about one year just to follow up on the 400 trade leads resulting from AMPRO '74." A new-to-export exhibitor said the promotional activities generated prospects far beyond expectations.

To reduce its dependence on Japan, which has been the leading supplier of raw materials and equipment, the Republic of China is encouraging imports from alternative sources of supply. The United States is in a favorable position, as it had a trade deficit of $735 million with Taiwan in 1973 and the Republic of China is undertaking constructive measures to reduce this imbalance. U.S. exports to Taiwan increased 75 percent during 1973 and this trend is expected to continue in 1974.

TAIWAN SHOW—*Richard King (right) of Fiatt Industrial Co., agent for Snap-On Tools Int'l, introduces his hand tools to C. K. Yen, Vice President of Republic of China. To Yen's right are H. K. Shao, Board of Foreign Trade, and Stephen Wang from Fiatt.*

DOING BUSINESS — *Peggy Chun of Pacific Exports, Honolulu, signs agency agreement for her waste water treatment systems and chemicals with Y. T. Shih of Unison Co. Ltd. Below, B. F. Lee, sales engineer, demonstrates World Export Disc's Wells-Index die sinking machine to General Lai Ming-Tang, Chief, General Staff of Chinese Armed Forces.*

Worldwide Business Outlook

British Pin Recovery Hopes On Demand, Export Strategy

Current prospects for the British economy are poor. After a boom in 1973 that began to fade at the end of the year, the energy crisis and labor problems led to limitations on use of power by industry, reducing output substantially in the first quarter of 1974 and diminishing prospects for economic growth this year.

The new Labour government does not have a parliamentary majority. The British economy can be viewed as in a transitional period; the direction in which it is heading is not completely clear, but slower growth and weakened business confidence appear likely. The government economic policy, enunciated in the March 26 Budget Speech, is cautious about reflating demand, trying rather to restrict domestic consumption and move resources to the export sector. This strategy depends on export markets as well as union cooperation. If it fails, Britain could well be heading towards a period of recession in late 1974.

The recovery of industry from the power limitations will require 3-5 months. By July or August, however, productive potential should be back to normal growth trends. The economy may grow slowly in the second half of the year. The leading influence in such growth would probably be exports (the present sterling exchange rate is very competitive) and the building up of inventories.

Forecasts indicate that GDP will not grow in real terms during the year. Some even see a decline in real output if inventory accumulation is not strong.

There is also the problem of whether demand will weaken as a result of the oil price increases and contractionary fiscal policy. The rising cost of oil to Britain will not be offset by an equivalent rise in exports to the oil producing nations (this is true for all industrial oil-importing countries). Thus, there is a reduction in domestic purchasing power, and unless offset, this will reduce domestic demand in the United Kingdom.

In addition, public expenditure has been cut and taxes raised in recent months. In December, the Conservative government cut public expenditure by £1.2 billion in an effort to reduce demand in 1974. At the time, inadequate oil supply was feared as a constraint which would reduce output more than income, creating excess demand and worsening inflationary pressures. (Oil supply is no longer regarded as a problem in this regard.)

The new Labour government has now introduced its budget, raising tax revenues by twice as much as expenditures (i.e., revenue increases of £1.4 billion vis-a-vis expenditure increases of £700 million). Its strategy is to move resources to the export sector and to retain confidence abroad. But this, plus price increases for nationalized industries announced in the budget (coal, steel, electricity, postal rates) as well as increased sales taxes on gasoline, alcohol, cigarettes, and betting, may work in a contractionary way. The government has promised a second budget this year which could, if necessary, attempt to reflate demand.

The United Kingdom also faces a large current account deficit, due to the oil price increases, excess demand, and supply constraints of the three-day workweek.

The prospects for overall growth are not good; the prospects for inflation are even worse. The oil price rises, the price increases mentioned above for coal, steel, and electricity, and the workings of the Stage 3 wage code which has an escalator clause, will lead to an increase in retail prices generally predicted to be around 15-17 percent. In addition there is a question as to whether the unions will exercise wage restraint, despite a pledge, particularly in view of the inflation rate.

The government is endeavoring to limit price rises through tighter price controls on industry, wholesalers and retailers, through subsidies on food, and through restrictive fiscal policy reducing the government borrowing requirement. But the efficacy of these is not clear (except that the food subsidies will help keep food price rises lower than they otherwise would be). The tighter price regulations may inhibit price rises, but they also may exacerbate company liquidity problems, cut profit margins, and retard recovery of industry. Moreover, they may create distortions in production and distribution and lead to shortages of some goods.

Proposed tax changes

The new budget increased the corporate tax rate from 40 to 52 percent. The new government has also proposed changes in taxation of foreign income. Full proposals have not yet been published, but the changes are reportedly of two sorts. Foreigners temporarily working in the United Kingdom whose employer is resident abroad will, during the first five years of their residence, be liable for U.K. tax on half of the earnings they receive for the job they do in the United Kingdom. The longer-term definition would affect foreigners working or living in the United Kingdom for substantial periods — "ordinarily resident here for five out of the six preceding tax years" — beginning from the tax year April 1976-77 onwards. Foreigners falling into this category will be treated for income tax and capital gains tax as if they were U.K. natives, and would be charged tax on the basis of world income and capital gains. In the case of overseas income arising from employment, pensions and trade, professions and vocations, 90 percent of such overseas income of residents or natives will be taxed, irrespective of the amount remitted to the United Kingdom.

U.S. businessmen should keep themselves informed of the current status of the proposed tax changes.

Despite the bleak outlook in the longer-term, Britain will probably remain a good market for U.S. products. In the short-term, there are shortages of many materials and commodities as a result of the industrial slowdown which will be met, at least in part, from imports during the restocking-of-inventories phase. In the longer-term, many British industries will continue to grow and require imported materials and capital goods. This will be especially true for U.K. industries with a high activity in exports, if the government's strategy works.

Specific industry comments

Aerospace — Prospects for U.S. exports in the aerospace field during 1974 are even more limited than they were in the previous year. The future of the Concorde project, which has a significant U.S. input of components and materials, is in serious doubt, and the proposed "Europlane" cooperative project now has been cancelled. Hawker-Siddeley's proposed HS-146 jet feeder liner remains a good prospect for U.S. component sales, but virtually the only other attractive U.S. export possibilities in view at present are in the supply of parts and consumables for aircraft now in operation.

Electronics — Electronic components are, and likely will be for the next two years, the subject of heavy market demand in the United Kingdom because of drastic underproduction in recent years. U.S. exporters in this field, to the extent they can increase production beyond current requirements, will find a ready-made market in the United Kingdom. Other segments of the industry are not so encouraging, however. Electronic capital goods — notably computer and production control systems — are expected to move at the relatively inactive pace of 1973. Public sector buying will be slow in this area. The long-proposed modernization of the Post Office Corporation's telephone exchange system in particular will be further delayed.

The outlook for consumer electronics,

although mixed, is considerably less encouraging than it was a year ago. The market for color television sets, for example, is softer due largely to time payment restrictions, general contraction of demand, and a fall of consumer confidence. According to various industry sources, overall 1974 electrical consumer goods demand may well be down by 25 percent in comparison with the previous year. Certain types of electronic equipment such as mini-calculators are exceptions to this trend, however, and will present reasonably good export prospects.

Electrical Power Generation — A highly significant potential export to the United Kingdom — light water reactor power installations constructed under U.S. licenses — will become an actuality only if a U.K. Government decision, expected soon, is basically in favor of the "import" of this technology. Industry leaders are in favor of the purchase of U.S. reactors as a means to insure reliable and timely sources of electrical power in the coming decade.

In another area of heavy electrical engineering, export possibilities for diesel powered industrial and standby generators and related power equipment are vastly improved as a result of recurrent power shortages and the recent three-day workweek. Generators from fractional horsepower to those suitable for power on the individual plant level should find a good market over the near-term.

Coal — With coal stocks severely depleted from the prolonged work slowdown and subsequent strike and with the oil crisis leading many firms to convert to (or back to) coal, there exist major short-term opportunities for coal sales to the United Kingdom. In addition, U.K. experts in the coal and energy fields are tentatively committed to long-term expansion of coal uses.

Steel — Steel, particularly tubular steel for oil exploitation, is currently in extremely short supply. Prognosticators disagree as to what the duration of the shortage will be. However the long-term market may turn out, current opportunities are great indeed.

Chemicals — Shortages in this field appear to be worldwide. Should U.S. firms improve supply capacity ahead of other nations, a major market exists in the United Kingdom. Resident experts foresee no short or medium-term relaxation to the demand over supply situation in the U.K. and prices received are very high.

Channel Tunnel — Work is still in the service and planning stage and the new Labour government has agreed to proceed with the £30 million Phase II work on this project. Although the new government will undertake its own review for work on the subsequent stage of the project (£800 million Phase III), prospects for the overall project appear to be good. U.S. firms, leaders in the field of earthmoving equipment and modern mining techniques, should have major sales opportunities.

Do-It-Yourself — The do-it-yourself market is expanding in the United Kingdom not only as a result of increased hobby interest, but also because service costs are rising at a higher than average rate. U.S. hand tools, adhesives, and various home gadgets and apparatus capable of personal installation should sell well. There is also a growing trend for individual servicing of personal vehicles and a growing market for various self-installed car accessories.

Fashion — While this market is constantly changing and requires significant lead times, various sources report a real opportunity for U.S. sportswear for women and for children's clothing. U.K. competition is expensive in most fashion areas. American swimwear fashions have long been popular in Britain. U.S. producers of the above mentioned lines and the long successful American lingerie and nightwear fashions should seriously look at the U.K. market.

American Boats and Boating Accessories — U.S. devaluations, inflation throughout Europe, higher travel costs and general upgrading of local facilities, have all contributed to a trend to vacation near home. With its vast water recreation areas, England is a natural market for the recreational boating industry.

General Sporting Equipment — Interest in new sports and in physical fitness recreational equipment, added to generally higher production costs in the United Kingdom, offer opportunities for U.S. firms. Expenditures on sporting and recreational equipment grow at a rate of around 10 percent a year. Recently, there has been keen interest in home swimming pools.

Petroleum Equipment — Prospects in this area are good as progress in exploration, production, and transmission of North Sea oil and gas is maintained and even speeded up. At least one land and two undersea pipelines are now being constructed; others will be started soon. Construction of drilling ships and drilling and production platforms is now well under way in Scotland and Northern England.

Food and Drink Processing Machinery — Sales of food and drink processing machinery excluding grain milling machinery fell off in 1973. A survey in late fall of 1973 indicated that 53 percent of food manufacturers and 48 percent of drink and tobacco manufacturers intended to increase their capital expenditures on plant and machinery in the next 12 months. Import demand, therefore, should hold up well. Imports were up some 38 percent in 1973 over 1972.

Industrial and Process Plant and Equipment — This area is also expected to expand during the next 12 months. In addition to previously announced plans of the British Steel Corp. to increase production capacity, projects have been announced by the Imperial Chemical Corp. for expanding ammonia capacity and by other chemical and petroleum companies for increased refinery and tank farm installations. GKN, British Rail and British Leyland Motor Corp. have also announced new investment plans for 1974. It remains to be seen how fully these will be implemented in light of present economic difficulties.

LONDON DEMONSTRATION—*Herb Speerstra (right), vice-president of NTM Harco Industries Inc., shows I.D. and Data-Card Systems to T.S. Copeman of Computerguard Ltd. at a recent Trade Center show.*

Mechanical Handling Equipment — The general increase in demand for all types of mechanical handling equipment for the past two or three years has been above average. Fork-lift trucks, lifts and hoists, cranes (for shipbuilding, platform construction, and steelworks, but not mobile cranes for the building industry) as well as storage systems and conveyors should maintain previous demand levels in 1974.

Metal Working Machine Tools — Companies in this sector have full order books and very lengthy delivery times. This year should see firms fully occupied, leaving room for some imports. As present orders are filled and if the normal cycle of demand for machine tools remains true to form, domestic demand in the second half of 1974 should tend to weaken. Orders and sales of plastics machinery have been and should continue to be good unless the worldwide shortage of plastics raw materials persists and discourages investment.

Packaging and Bottling Machinery — Demand in this sector should keep pace with, if not slightly lead, the food processing industry. Demand for printing and graphic arts equipment has been particularly high. Steeply rising costs for paper will tend to temper demand but may be offset by increased work orders to British printers, since continental printing costs have become relatively more expensive than British. Sales of refrigeration machinery and heating, ventilating and air conditioning equipment will probably have a moderate setback this year due to the depressed building industry.

Agriculture — U.K. agricultural imports from all sources during 1974 will probably be down compared with the high level of 1973. At this early stage, crop prospects look good.

Germany May Be Reaching Trough Of Current Slowdown

Germany is in a period of slower than usual economic growth, accompanied by rapid price increases.

Because of this reduced activity, the U.S. Embassy in Bonn does not expect real imports to grow as rapidly in 1974 as in past years. Nominal imports, on the other hand, should rise by more than 20 percent as import prices shoot upwards, and the United States, with the advantages of past devaluations, should do fairly well in 1974. The economy should begin to reaccelerate in the second half of this year, so 1975 should be a very good year for U.S. exporters.

The energy problem, which dominated the economic scene during the last quarter of 1973, has now become simply another, albeit key, input into the larger question of inflation. The consumer price level is likely to rise by nearly 10 percent in 1974 and many forecasters predict an even higher rate.

Even given the cost-push nature of inflation in Germany, a rate of inflation as high as that forecast can take place only if total demand rises fast enough to allow increased costs to be passed on as higher prices. At this time it appears that—beyond just providing enough impetus to absorb the higher prices—total demand will rise fast enough to even add additional pressure on prices.

Although the economy slowed faster than anticipated in the second half of 1973 (real GNP actually declined compared with the first half of 1973), a number of indicators suggest that the trough of this abbreviated cycle may already have been reached: the downward trend in the growth rate of incoming new industrial orders appeared to end in January and February; orders for private vehicles (a weak sector even before the oil crisis) also appear to have bottomed out; the unemployment rate did not rise further in February, and, when seasonal fluctuations are discounted, seems to have peaked in December; polls of business sentiment show that pessimism reached a peak in December and has declined somewhat since that time; export orders (those in hand are already sufficient to insure a very good year) continue to come in at a rate well above the 1970-1972 average; and order backlogs held steady in the fourth quarter of 1973 at around 3.4 months (versus 2.5 months in the 1966 slump).

Indicators point to recovery

All of these indicators seem to corroborate tentatively the conclusion most forecasters have reached: the slowdown reached a trough during the first half of this year (both production and employment) and a recovery will be under way by the second half.

Although the above figures could serve as the consensus prognosis of most forecasters, there is still considerable room for error. Key uncertainties are: private consumption could rise more slowly than forecast—in the past consumers have tended to lower their marginal rate of consumption when the rate of inflation accelerated; interest rates remain high and recent questionnaires showing respectable plans to invest could reflect a catching-up period following the lifting of the investment tax in December; and if another round of the oil crisis should unfold or real growth among Germany's principal trading partners be less than now expected, export prospects would worsen.

The Bundesbank seems determined to maintain a tight money policy for the time being, and is unlikely to change that position so long as wages continue to rise at the current rate. Fiscal policy has, however, shifted in an expansionary direction. The 11 percent tax on investment was removed in December, and tax incentives reinstated to encourage both residential and business construction.

Other steps have been taken to help structurally (financial assistance for low-cost housing projects, for example). In addition, limits on public sector borrowing and spending have been lifted. The government has stated, however, that the 10 percent surcharge on corporate and higher-level private income will not be discontinued before its scheduled expiration next month.

Although strong cost pressures, and a 2 percent rise in real GNP, leave little doubt that inflation will be in the range predicted above, it is worth noting that Germany's performance in this area is still among the best in the industrialized world—and will probably remain so in 1974. This conclusion assumes that oil prices will not rise by more than the amounts already posted. At this point it also appears that oil supplies will be sufficient to meet demand, although this picture could change if the economy begins to expand even more rapidly than forecast, or if the German public resumes the driving habits which preceded lower speed limits.

Most of the effect of the 1971 dollar devaluation should be felt this year, and much of the 1973 devaluation is already being noticed, so U.S. products should enjoy clear price advantages. If the United States continues to maintain relatively good price performance compared with third countries, U.S. exporters should be able to reverse the trend of past years and increase their share of the German (non-petroleum) import market. Last year U.S. exports managed to retain their share of the market (8.4 percent in 1972 and 1973), although this was due to the very strong performance of agricultural products.

Those U.S. producers who sell intermediate or capital products to industry will do best in 1974 (German steel and chemicals producers, for example, are still enjoying a pronounced boom). Prospects for exporters of consumer goods are not so bright.

SELLING TO SWITZERLAND IN GERMANY—*G. B. Levy (left), representing the U.S. firm Photovolt Corp. at a Frankfurt show, explains to Swiss guest his firm's Aquatest II.*

The outlook for 1975 appears good across the board, if the rate of real growth begins to accelerate in the second half of this year, as expected.

U.S. economic/commercial officers throughout Germany recently surveyed major lines of manufactured exports from the United States to determine which offer the best prospects for incremental sales in the months ahead. Their findings tend to corroborate the above comments. The hottest prospects are listed below.

Business equipment and systems are the best bet. Best sales are likely to be in electronic desk calculators and electrostatic copiers. Sales of those items could expand by as much as last year's 25 percent.

Computers and related equipment are almost as promising. Best prospects appear to be: digital compact computers, central processing units, central storage units, peripheral storage units, peripheral input/output devices, and recording equipment.

American manufacturers supply more than one-half of all **electronic production test equipment** imported by Germany ($70 million worth in 1973) and sales in latest state-of-the-art lines such as semi-conductor and integrated circuit production equipment, printed circuit production equipment, wiring assembly and other interfacing equipment, passive component production equipment, and automatic computerized test equipment, could grow by as much as 35 percent in 1974.

Prospects in the sister product line, **electronic components,** are not quite as good, because more local production facilities, both American and German-owned, are coming into production. In 1973, however, German demand exceeded the American electronic industry's capacity to supply, and many opportunities to increase sales exist. The following lines should do especially well: special power transistors (including Si-RF power transistors), MOS integrated circuits, LSI MOS memory integrated circuits, COS/MOS digital integrated circuits, zener diodes, color TV tubes, capacitors, high-speed thyristors, dry-reed relays, and PC connectors. A tip for new-to-market firms: sign up now for space in the Commerce Department-organized U.S. exhibit at Electronica '74, central Europe's largest electronic industry trade show, in Munich in November.

Fluid power and transmission equipment should enjoy strong growth for at least the next one or two years. A sampling of these products: pumps — leakproof, canned circulation pumps for nuclear cooling systems; small piston pumps for high-pressure cleaning; heavy duty chemical process pumps for extreme pressure and temperature conditions; and special slurry pumps. Valves — all-purpose electro-magnetic continuous proportional control valves, leakproof valves for nuclear reactor cooling systems, and monel and stainless steel gate and ball valves for 9,000 psi operation. Compressors — high quality, high capacity radial and axial piston air gas compressors, and high pressure centrifugal compressors for polyethylene production.

U.S. agricultural exports to Germany should continue to be strong this coming fiscal year. With the higher level of German disposable income and the recent slippage in basic U.S. commodity prices, the German import market should continue to attract imports of grain and protein products from the United States. This is especially true in the livestock feeding area where production estimates for German red meat are up about 5 percent from last year's level. The Embassy's estimate is for something close to last year's value of $1.5 billion.

India Fights Tough Economic Problems; U.S. Prospects There Tied To Outcome

Sales and investment prospects in India for U.S. firms will depend greatly on how India weathers economic difficulties it is now facing.

This may well be the country's most dismal year, in terms of economic performance, since independence, with little or no growth in real GNP and a further drop in per capita income. Industrial production is stagnant because of increasing labor troubles, shortages of key raw materials, and serious constraints in the areas of power and transport. Foodgrain production may improve on last year's figure but will almost certainly fall short by an appreciable amount of the record level of 1971, a year in which there were approximately 40 million less people to feed.

Anthony H. Wallace, Commercial Attache at the U.S. Embassy in New Delhi, notes that 1974 was to be the first year of India's Fifth Five-Year Plan, at the end of which dependence on net foreign assistance was to be reduced to zero. An alarming rate of inflation (26 percent increase for wholesale items in the last 12 months), the continuing need to import sizable amounts of foodgrains, and the dramatically increased oil bill (from $400 million in 1973 to at least $1 billion in 1974) have combined to almost totally destroy the credibility of the plan's basic assumptions.

Imports will be lower

India finished this fiscal year (April 1 to March 31) with a relatively small (by historical standards) trade deficit of less than $300 million. Good export performance coupled with a somewhat lower rate of imports were responsible for this good result, which leaves India's reserves at more than $1 billion, or more than the equivalent of four months' imports.

India's export performance in the coming fiscal year, however, will have to be considerably better if the trade balance is not to deteriorate markedly. A combination of heavy food and fertilizer purchases and unexpectedly high expenditures on crude oil (India will be 65 percent dependent on imports for at least three more years) could leave very little room for other imports.

This year's import policy is one of wait-and-see, which avoids the temptation to conserve foreign exchange by imposing additional controls and takes the bolder but perhaps riskier course of allowing those industries which can promise good export performance to obtain foreign exchange allocations for machinery, raw materials, and spare parts at or above last year's levels.

The policy of import substitution at any cost has been down-played. Success of the new import policy, which will be in effect for a trial period of six months instead of the customary one year, will depend greatly on the ability of manufacturers to overcome existing production constraints, many of which were caused by previous restrictive import policies.

U.S. exports to India last year totaled $506 million, an increase of 46 percent over 1972. Large cash food purchases and price rises contributed to the increase to a considerable degree. Last year was the first since 1950 in which AID and PL-480 credits were not available to finance any of these sales. Indian exports to the United States and total trade turnover also increased and the United States remained India's largest trading partner. The U.S. share in India's import market was 14 percent in 1972 and an estimated 17 percent in 1973.

For the immediate future, U.S. exporters will have to rely primarily on free foreign exchange purchases or privately arranged financing. The Export-Import Bank resumed lending to India in mid-1973 and exporters of manufactures will be able to take advantage of the standard EXIM package (10 percent down, 45 percent EXIM, and 45 percent commercial bank) which offers a weighted interest rate considerably lower than straight commercial financing.

U.S. products have long enjoyed a good reputation in India. The improved export performance in 1973 is also partly due to improved political relations between the two countries, increased price competitiveness as a consequence of recent exchange rate realignments, and shorter delivery periods.

In the absence of soft financing, U.S.

exporters should be prepared to consider innovative financing packages, including in some cases barter-like arrangements. Among possibilities are pay-as-you-export schemes involving a U.S. exporter of machine tools, for example, and a U.S. merchandiser who would be willing to take in payment goods manufactured with these machine tools after they had been installed in India. An increasing number of U.S. firms are looking into the possibility of special trading arrangements (mainly barters) to facilitate sales in the Indian market. There are a number of reputable European special trading firms registered with the Indian State Trading Corporation who are willing and able to export Indian products in exchange for foreign exchange allocations which are then reserved for use by the same firms to import needed items such as textile machinery, power equipment and machine tools.

State import role expands

State trading agencies such as the State Trading Corporation and the Minerals and Metals Trading Corporation are handling an increasing percentage of imports. The efficiency of these organizations has improved noticeably in the past year. U.S. exporters will find it advisable in many cases to deal with these agencies in order to promote the sale of their products in India.

In all dealings in India, whether with a State Trading entity or private buyer, on a cash basis or through a loan or special trading arrangement, U.S. exporters should work wherever possible through a competent local agent. The agent will prove useful in reporting and negotiating on trade opportunities and in following up with the government to ensure that foreign exchange is made available.

Some of the more promising product categories for U.S. exports to India include railroad equipment, textile machinery, power generation distribution and transmission equipment, mining and earthmoving equipment, shipbuilding and port maintenance equipment, telecommunications, scientific and control instrumentation, chemicals, and fertilizers. Food grain exports could also reach sizable proportions in 1974.

During the past year, Department of Commerce-sponsored trade missions (railroad equipment, textile machinery, and power equipment) visited India and discovered very good near-term sales prospects. Additional missions and catalog shows are planned for this year.

The record of U.S. export sales against international tenders issued in connection with World Bank/IDA credits extended to India has improved. U.S. firms should take an even greater interest in these tenders, especially those in the areas of power transmission equipment, water supply systems, railroad equipment and telecommunications.

Recent policy announcements have spelled out clearly for the first time the Indian Government's intentions concerning the extent of foreign equity participation. The guidelines reflect the government's continuing interest in limiting the foreign share in most joint ventures to 40 percent. The government also appears to be making a determined attempt to speed up the process of issuing an industrial license, formerly a very complicated and time consuming exercise which discouraged many potential foreign investors.

Foreign investments are judged on (1) their capacity to earn foreign exchange through exports; (2) the ability to save foreign exchange by investment in products leading to import substitutions; and (3) the extent to which technology is transferred to India. The government is now looking more carefully at long-term balance of payments implications of foreign equity joint ventures. The balance between foreign exchange outflows from India (occasioned by remittance of dividends and royalty payments and import of machinery, raw materials, and spares) and inflows (value of exports and import substitution benefits) must be in India's favor.

A detailed discussion of Indian foreign investment guidelines and licensing procedures can be found in the Department of Commerce document, **Establishing A Business in India,** OBR 72-009, May 1972, which has been updated to March 1974 by an Embassy briefing paper.

In the past, American investors have encountered difficulties in expanding or diversifying their operations in India. The Government of India has also on occasion been reluctant to extend royalty and technical agreements. Government price controls and resource allocation policies have adversely affected, and to a lesser extent continue to affect profitability of domestic and foreign firms.

Positive elements

There are some positive elements as well. Among them are: a large and growing market; well developed infrastructure facilities; extensive natural resources, especially minerals; a well established domestic capital market; competent managers and adequate skilled labor; and relatively low wages.

The past record of the profitability of foreign business investments in India indicates that a company willing to operate within government guidelines can do well. Investments which gain relatively speedy approval and enjoy smooth operations in India tend to be those which offer needed technology in a priority area, promise exports, enlist a well regarded local partner, maintain a minority foreign equity, and present no burden for India's balance of payments.

A joint venture with a public sector agency insures even smoother sailing, especially later on when import licenses are required and expansion of diversification is contemplated. At present there are several successful examples of pure public sector or "joint sector" partnerships involving American firms. Prospective U.S. investors are encouraged to abandon any innate suspicions of linkups with the public sector and examine possibilities now being proposed by some of the more aggressive state Industrial Development Corporations.

Going slow on nationalization

There is increasing realization within the Indian Government that there is little point in nationalizing additional industries, at least until the ones which have been nationalized already are operating more efficiently. The basic thrust continues to be toward increased social ownership of industry but the march has been slowed somewhat by the country's current economic difficulties.

Last year, steel production hit the lowest level in a decade and coal production failed to keep up with population. Labor difficulties on the railways starved power plants and tied up millions of dollars worth of export shipments. The government has reduced the intensity of its attacks on the large private industrial houses because in present conditions resumption of growth in industry is vital. Small enterprises encouraged by past government policies to play a greater role have by and large failed because of lack of sufficient capital and technical know-how. As a result, the government has quietly begun to allow the larger houses to make new investments, even in areas on the periphery of so-called "core" or priority sectors.

Areas worth consideration for investment are: projects designed to improve utilization of India's vast coal resources (coal gasification and liquefaction and processing for use in power plants and industry), electronic components, chemicals and industrial instrumentation. While foreign assistance in location and extraction of most of India's mineral commodities has not been welcomed as yet, opportunities appear possible in mineral beneficiation and processing, minerals transportation (off-highway ore haulage units, pipelines, conveyors and ropeways) and selected support machinery. In this regard, emphasis may best be placed on copper, lead, zinc, iron ore and phosphate rock.

In oil, India has inaugurated deepwater offshore exploration using American equipment and expertise in, and in conjunction with, its government-owned jack-up rig. Additionally, the government is currently negotiating with American (and other foreign) firms for offshore drilling contracts, and has announced its intention to accelerate onshore oil exploration. Drills and ancillary equipment sales, and participation in oil and gas pipeline projects (onshore and offshore) should be investigated.

East Germany Consolidates, Stresses Quality, Efficiency

The performance of the centrally-planned East German economy under its current Five-Year Plan (now more than 60 percent complete) appears satisfactory, according to the U.S. Mission in Berlin. This period, as intended, has been essentially one of consolidation, after overly ambitious growth objectives in the previous plan created some serious sectoral dislocations and distortions.

The German Democratic Republic's current plan places emphasis on channeling of investment funds into a small number of high priority industrial sectors and projects, on plant automation, and more efficient utilization of resources.

The following objectives are stressed: fuel and power—substantial investments in new capacity; petrochemical—a continued high growth rate; engineering—within the context of CEMA specialization, concentration on manufacture of processing equipment, precision goods, and metal cutting lathes; iron and steel and non-ferrous metals—little new capacity; construction—lower growth targets with expansion focused on important industrial projects and mass-produced housing; consumer goods—emphasis on quality and increased productivity, with high growth for glass and ceramics, and synthetic fibers; and agriculture—stress on industrialization and mechanization, intensified use of fertilizers, and increased production of animal fodder.

In the middle year

In the middle year of the current plan, East Germany has had one of its more satisfactory periods of economic growth. Agriculture has shared in this development. Because of last year's record harvest and large imports of oilseeds and grain, livestock inventories and meat production were further expanded. However, yields of grain and ground crops, adversely affected by drought, fell below 1972's record levels.

While fulfillment figures for the year indicate that most of the plan's industrial targets were approached or exceeded, monthly statistics show that growth declined markedly in the second half of the year. This probably produced more modest targets for 1974.

The nation has several chronic economic problems: a tight labor market; energy shortfalls; transportation deficiencies; and shortages of raw and semi-processed materials. These problems appear to have been aggravated by the relatively rapid progress achieved in the first half of 1973, probably contributing to the decline in growth towards the end of the year.

Fulfillment of 1974 plan targets is dependent on several factors. Most important, in the absence of labor reserves, is whether the projected significant increase in productivity will be achieved. Also important will be the economical use of raw materials and recycling of used materials, more rapid application of research and development to production, and more efficient exploitation of existing plant.

Among external factors crucial to the economic progress of this resource-poor country will be the availability of adequate supplies, at reasonable terms, of industrial raw materials, particularly petroleum and natural gas and agricultural commodities. In this connection, the U.S. Mission envisages no acute petroleum shortage in the near term, since East Germany reportedly is receiving preferential treatment from its main supplier, the Soviet Union. But serious concern on the part of the East Germans as regards long-term availability of petroleum has apparently led to renewed emphasis on brown coal for production of energy. Of great significance, too, will be the degree of access East Germany can acquire to Western technology needed for rationalizing and automating industry.

Given all of these factors, many of which are beyond the government's control, fulfillment of the current annual plan is somewhat in doubt.

While many import requirements of the East German economy seem obvious, prospective U.S. suppliers must also recognize that foreign commerce is a state monopoly. Trade volume, structure and geographic distribution are determined by the state. Various foreign trade organizations and governmental organs have to tailor individual transactions to planning requirements, existing bilateral agreements, and the availability of foreign exchange.

Moreover, roughly two-thirds of the country's foreign trade, which expanded by 14 percent in 1973, continues to be with the CEMA countries, and some 60 percent of this is with the Soviet Union. Trade with the Federal Republic of Germany accounts for 10 percent of the total, while trade with all other countries of the industrialized West amounts to approximately 15 percent. The remainder is with the third world.

These proportions have changed little in recent years, although trade with the West has been on an upward trend. Trade with the United States remains minimal.

According to U.S. Census Bureau statistics, 1973 saw U.S. exports to East Germany of $28 million and imports of $10.5 million. Nevertheless, considering the East German economy's needs and the planners' objectives, a wide range of American products and equipment could have a potential market there.

Agricultural products will probably continue to comprise a disproportionately large share of U.S. exports to East Germany, but prospects for export of various U.S. industrial products, particularly labor-saving equipment and high technology items, as well as certain consumer goods, appear reasonably favorable.

Those product categories which appear most promising include: industrial measuring and control equipment; basic chemicals and petrochemical feedstocks; chemical plant, machinery and equipment; food processing and packaging machinery; electronic industry production equipment; electronic data processing equipment; and medical and surgical equipment.

For economic, as well as political reasons, satisfaction of consumer wants remains an important objective of the regime. While most consumer durable and non-durable requirements will be satisfied from domestic and CEMA production, it would appear that opportunities exist for foreign suppliers as well.

The plan projects considerable investment, essentially for rationalization purposes, in the light industry sector. This indicates possibilities for sales of appropriate production machinery.

Furthermore, modest East German purchases of stylish western garments, and plans to bottle a well-known American soft drink, indicate that some foreign currency for consumer-oriented goods and equipment may also be available. Almost 80 percent of East German imports from the United States in 1973 consisted of agricultural products.

Considering record levels of livestock and poultry inventories, opportunities for oilseed exports for the remainder of 1974 would appear good.

Receptive to exchange

As a highly industrialized state, the German Democratic Republic has been receptive to exchange of technology, patents and licenses. In fact, the East Germans already have been able to elicit interest in their own know-how from various western enterprises.

As regards cooperative ventures and mixed-equity joint enterprises, however, East Germany has been to date reluctant to engage in such arrangements.

While the reasons for this attitude are primarily politico-ideological, the country also has a severe shortage of labor that places limits on the establishment of new productive facilities. Therefore, although there have recently been indications that the East German position on this question is under review, progress in this area is likely to be slow at best.

For new-to-market firms, a visit to the semi-annual Leipzig Fair (next scheduled for Sept. 1-8 and March 9-16) can provide a useful opportunity to evaluate sales prospects on the spot. Modest presence at the Fair could further facilitate an established business relationship with East German enterprises.

Andean Members Mull Fertilizer Industry Plan

The Andean Common Market Secretariat has drawn up a program for the chemical fertilizer industry based primarily on trade liberalization. Unlike other Sectoral Programs of Industrial Development, the fertilizer industry program does not assign plants to specific countries. Since many production processes are based on locally available raw materials, the Secretariat believes the products should become competitive in the world market.

Once the agreement is approved by the six member governments, intra-Andean tariffs on fertilizer industry products will be reduced to zero within 30 days. The common external tariff, 5 percent and 10 percent ad valorem duty on c.i.f. value, will be put into effect within 30 days on products currently being produced. In the case of new production, the CXT will be effective on Dec. 31 of the year prior to the year of production start-up. For products not produced in the region, member countries must adjust their current tariffs in automatic annual steps beginning Dec. 31, 1976.

An Advisory Committee on the Chemical Fertilizer Industry composed of representatives from each country will meet to encourage intra-Andean trade, cooperative financing of new plant and equipment and other activities designed to strengthen this industry. A list of the products contained in the proposal and the CXT rates is available from the U.S. Department of Commerce, OIM, LAD, Room 4036, Washington, D.C. 20230.

New Global Market Survey

Export Opportunities for Electronics Industry Production and Test Equipment **is the latest in a series of Commerce Department Global Market Surveys focusing on overseas marketing opportunities for U.S. suppliers in selected industries. This survey is an export sales planning tool for marketing decision makers of U.S. firms that manufacture production and test equipment for the electronics industries. It is both a ready reference of facts and figures on foreign electronics industries and a guide to profitable growth opportunities through exports.**

Export Opportunities for Electronics Industry Production and Test Equipment **contains a series of reports based on market research conducted in 24 countries for the Office of International Marketing of the Department of Commerce. They are intended to aid company executives in planning exports of U.S. production and test equipment to foreign electronics industries.**

This publication is available for $1.75 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Italian Government Imposes Import Deposit Requirement

Effective May 7, the Italian Government imposed a temporary import deposit regulation.

Importers will be required to deposit an amount equal to 50 percent of the c.i.f. value of imported goods at the time of customs clearance in a non-interest bearing account held for 180 days by the Bank of Italy.

Most raw materials and certain capital equipment are exempt. Also, the deposit requirement does not apply to shipments valued at less than 1 million lire (about $1,600) and to temporary imports. An analysis shows that about 40 percent of Italian imports in general and 24 percent of imports from the United States are affected. This measure was introduced in an effort to ameliorate Italy's severe balance of payments deficit.

Information on specific products subject to this deposit may be obtained from the European Regional Affairs and Trade Regulations Staff, Office of International Marketing, U.S. Department of Commerce, Washington, D.C. 20230, telephone (202) 967-2346.

Inquiries should contain a complete product description, including BTN, SITC or U.S. Schedule B Export Commodity numbers, if known.

Spain Extends Duty Reductions

The Spanish across-the-board duty reduction of 5 percent, which went into effect in January of this year for a three-month period, has been extended for three more months to July 10, and increased to 10 percent.

The 10 percent reduction (e.g., a 20 percent rate is cut to 18 percent) applies on all goods dutiable at 5 percent or more which are not already reduced on the basis of two previous decrees—mostly textiles and petrochemicals.

Calendar For World Traders

May 29 — Houston — Export Workshop seminar, University of Houston. Sponsors: Commerce's Houston District Office, Small Business Administration, University of Houston, Texas Manufacturers Association. Commerce speaker: Robert Pritchard.

May 29-30 — Ann Arbor — The Near East: A Market of Growing Wealth and Needs, Campus Inn Hotel, University of Michigan. Sponsors: Commerce's Detroit District Office, University of Michigan Center for Near Eastern and North African Studies.

May 29-30 — New York — How to Take Advantage of Foreign Tax Havens and International Tax Treaties, World Trade Institute.

May 29-31—Dallas—First Annual International Trade Conference of the Southwest, School of Business Administration, Southern Methodist Univ. Sponsors: Southern Methodist Univ., Dallas and Houston Commerce District Offices, Dallas and Fort Worth Chambers of Commerce, Texas Industrial Commission, North Texas Commission, International Trade Association of Dallas.

May 30 — New York — Conference on the Legal Environment for Doing Business in the Arabian Peninsula States, Conference Center of the McGraw-Hill Bldg. Sponsors: American-Arab Association for Commerce & Industry, American Bar Association's Section of International Law.

May 31 — Louisville — Export seminar, Brownsboro Holiday Inn. Sponsors: Commerce's Memphis District Office, Kentucky Dept. of Commerce, Small Business Administration, Louisville Area Chamber of Commerce, Kentucky-Ohio Small Business Council, Kentuckiana World Commerce Council.

June 4 — New York — FCIB Round Table Conference, Summit Hotel. Chairman: Manuel S. Torres Jr., Export Credit Mgr., Johnson & Johnson International.

June 5-6 — New York — Introduction to International Taxation, World Trade Institute.

June 10 — Ashland, Ky. — Commerce Department luncheon, Rotary Club. Speaker: Memphis District Director Bradford H. Rice.

June 10-11 — New York — New York as a World Financial Center, Waldorf-Astoria. Sponsor: Financial Times of London.

June 11 — Louisville — Kentuckiana World Commerce Council meeting, Brownsboro Holiday Inn.

June 11 — Nashville — Export Workshop, University of Tennessee-Nashville. Sponsors: University of Tennessee, Nashville Chamber of Commerce, Commerce Department Memphis District Office.

June 13 — Memphis — Mid-South Exporters Roundtable, Claybrook Restaurant. Annual election dinner and program on Commerce Department trade missions.

June 13-14 — Brussels — Discussion on the experience of European companies operating in the United States, Brussels Sheraton. Sponsor: The Conference Board.

June 14 — Colts Neck, N.J. — Overseas Automotive Club's annual outing, Hominy Hill Golf Club.

June 18 — Chattanooga — Chattanooga Kiwanis Club World Trade Luncheon, Read House. Speaker: George J. Pantos, Deputy Under Secretary of Commerce.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies and appoint agents, and details on major construction and expansion projects.

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Foreign Investment Services Staff, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce Office.

OPIC indicates that the country involved is eligible for investment insurance coverage written by the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

1600 — NIGERIA — Large firm seeks U.S. technical partner to **participate in road and bridge construction projects.** American company would provide on-the-site foremen and technical assistance; Nigerian concern would furnish labor, capital and secure contracts. Nigerian firm has developed a 600-employee truck, bus and forklift assembly and service organization. It also has a 54-acre site in Lagos area to handle its automotive imports. Company has branch offices and distributors throughout Nigeria. Chief Garbriel Igbinedion, Managing Director, Mid Motors Nigerian Co. Ltd., Plot 21-22 Iganmu Estate, P.O. Box 2212, Lagos, Nigeria. Telex 21528. WTDR. P-74271.

2000, 3551 — KOREA — A firm is undertaking an expansion program for production of **sugar wafers, candies and potato chips.** Technical assistance and equipment from U.S. firms are sought. Technical assistance to produce potato chips is especially needed. Catalogs, quotations, and delivery terms for complete line of equipment for the following food processing lines are requested: automated food processing line for manufacture of potato chips, including slicing machine, dryer, cooking facilities and packaging machine; automatic processing line for sugar wafer production including oven, mixer, packaging machine; and automated food processing line for manufacture of filled center candies, a complete line of equipment other than packaging machine. Production capacities for projected expansion will be 150 to 200 square meters per hour for sugar wafers and 10 metric tons per day for candies. Mr. Yoon, Young-Dal, Managing Director, Crown Confectionary Co. Ltd., CPO Box 5247, Seoul, 100, Korea. Cable address: YOONCROWN Seoul. WTDR. P-74283. OPIC.

2011 — GUYANA — Company engaged in processing **ham, bacon, ham chips and cracklings** is seeking joint venture with U.S. firm. Technical assistance to expand operations is needed since government has banned imports of above mentioned products. Established in 1949, firm employs seven persons. B. S. E. Williams, Williams & Sons Meat Co., Ltd., 27 Saffon St., Georgetown, Guyana. WTDR. P-74285. OPIC.

2065 — SPAIN — One of largest manufacturers of Spanish nougat (Turron) wishes to obtain licenses to produce following products: **salted, dried nuts including peanuts; appetizers; snacks; corn flakes and other cereals; candies and sweets, especially those using dried fruits.** Additional information: Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. WTDR. P-74272.

2086 — NIGERIA — An established business seeks to produce **soft drinks.** U.S. company with well-known product is needed to provide technical assistance. The firm, which imports, distributes, retails, and services motor vehicles and motorcycles, can supply the bulk of capital, plant site and distribution network. Additional information: Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. WTDR. P-74284.

2400 — NEW ZEALAND — Ministry of Forests seeks proposals from U.S. firms to establish an industry to utilize **beech wood and other varieties of both hard and soft woods from South Island forests.** Proposals will be closely examined to determine both environmental and economic impact. Two forest areas are involved in the project: West Coast with an estimated annual volume of 27.8 million cubic feet of pulpwood and 2.3 million cubic feet of peeler/saw logs; and smaller Southland area with estimated annual output of 6 million cubic feet of pulpwood. Deadline for submitting proposals is 4 p.m. March 31, 1975. For information on the West Coast project, write Beech Project Officer, New Zealand Forest Service, P.O. Box 309, Nelson, New Zealand; for Southland contact Conservator of Forests, New Zealand Forest Service, P.O. Box 857, Invercargill, New Zealand. Overall inquiries should be addressed to Director General of Forests, New Zealand Forest Service, Private Bag, Wellington, New Zealand. P-74270.

2841 — CARIBBEAN — Seeks joint venture or licensing agreement for the manufacture of **household cleaning products.** Firm would require use of manufacturer's trademark, know-how, and information on financing project including machinery. Company manufactures under license a variety of cosmetic and personal care items. Contact: Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74273. OPIC.

2844 — NIGERIA — Proprietor of established chain of pharmacy/variety stores seeks licensing agreement to manufacture quality **cosmetics especially designed for black people.** Agency or distributorship arrangement is of secondary interest. Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. WTDR. P-74274.

2844 — VENEZUELA — Seeks licenses to produce **popularly priced fine cosmetics** to be sold through large distributors and department stores. Firm is large manufacturer of cosmetics, toilet soaps, pharmaceuticals, candies. Company sells throughout Venezuela and has paid-in capital of 2 million bolivares. Valebron & Cia., C.A., Aptdo. 694, Edificio Valebron, Esquina Puente Sucre, San Augustin Del Sur, Caracas, Venezuela. WTDR. P-74275.

2869 — INDIA — Seeks collaboration with U.S. firm to produce **PVC stabilizers.** Firm, Basant Plasto Chemicals Pvt. Ltd., New Delhi, has received preliminary government approval to establish plant producing up to 1,200 tons per year. For details contact: K. G. Mehra, Indian Investment Centre, 708 Third Ave., New York, N.Y. 10017. P-74276. OPIC.

2869 — THAILAND — Seeks joint venture or licensing agreement to produce **refrigerants** for the growing Thai air-conditioning industry. Firm was established in 1951, has sales of about $2.5 million annually and employs 4,500. It is a large trading firm with interests in mining, motor vehicles, heavy machinery, air conditioning and electrical equipment. Phornthep Phornprapha, Assistant General Manager, Air Conditioning & Electrical Division, Siam Motors Co., 404 Phaya-Thai Road, Bangkok, Thailand. P-74277. OPIC.

2879 — SAUDI ARABIA — Seeks joint venture with U.S. firm to establish a plant to produce **household insecticides** in Jidda. Requires assistance with finance, know-how, and technicians. Almost all household insecticides for Saudi Arabia are imported. Firm was established in 1971, employs 19, and presently imports and wholesales cement and iron bars and operates a travel agency. Saleh Bakhsh, Al-Anhar Trade, Travel and General Services, P.O. Box 1966, Jidda, Saudi Arabia. WTDR. P-74286.

3241 — NIGERIA — Established construction and building materials firm is seeking **U.S. technical partner for manufacture of cement** in Mid Western State of Nigeria. Extensive expansion of buildings and highways in the country should greatly increase demand for cement much of which is now imported. Nigerian company would plan to furnish most of capital for proposed project in conjunction with Mid Western State Government. U.S. collaborator would have responsibility for selection and installation of required equipment, training of staff and management of production. Managing Di-

rector of Nigerian firm is planning a U.S. visit in mid-June. Chief Paul K. C. Isagba, Managing Director, United Nigerian Co., Ltd., 47 Itire Road, Surulere, P.O. Box 5418, Lagos, Nigeria. WTDR. P-74278.

3429, 3952 — NIGERIA — Established distributor of electronic products desires U.S. technical partner for manufacture of **builders hardware** such as hinges, door knobs, latches, lock sets. Market currently supplied almost entirely by imported products. Olabode J. Amao, President, Joas Electrical Industries Ltd., Plot 19, Ilupeju Exte Sion, Ikorodu Road, P.O. Box 4957, Lagos, Nigeria. WTDR. P-74279.

3443 — NIGERIA — Seeks joint venture with U.S. firm to produce **LPG cylinders and steel tanks for storage of crude and refined oil.** Firm currently fabricates steel structures, office equipment and furniture, has gross sales reported to be $2.5 million per year. M. Singh, Manager, Nigeria Engineering Works Ltd., 134 Awolowo Road, South-West, Ikoyi, P.O. Box 3682, Lagos, Nigeria. WTDR. P-74288.

3443, 3823, 3317, 3531 — UNITED KINGDOM — Seeks licenses to manufacture **floating sections for oil tanks; contents gages for large oil tanks; swinging arm delivery pipes for oil tankers;** and **winches for small fishing vessels.** Firm is associated with company making marine and sewage pumps, and chemical paint. K. J. Harding, Director, Vanpipe Ltd., Harvey Works, Lingard St., Burslem, Stoke-on-Trent, ST6 1EE, England. P-74292.

3444 — INDIA — Seeks know-how and equipment to manufacture **100,000 lineal feet annually of low cost side winder flexible aluminum ducting** (plain, insulated and acoustic) having a diameter between 4 and 14 inches. Ducting will be made from corrugated aluminum, insulated with blanket of fiber plass and protected by outer sheet of plastic film. C. L. Gaur, Kamani Brothers Pvt. Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay 400 001, India. WTDR. P-74291. OPIC.

3523 — FRANCE — Seeks license to produce **bulk handling equipment for solid fertilizers.** Firm manufactures and distributes farm machinery and equipment, particularly for cereal and grain handling. Company employs 100, reports annual sales of $1.6 million. Has good reputation. Aime Daguet, President & General Manager DAGUET, 49 rue Pasteur, 28-Sours, France. P-74280.

3532 — INDIA — Major engineering complex seeks a license to manufacture **coal cutting machinery.** Firm reports that in view of the oil shortage, Government of India has substantially increased its coal production target during Fifth Five Year Plan (1974-79) from present 73-75 million m.t. to 135 million m.t. annually. This will lead to increased demand for coal-mining machinery. Indian concern plans to produce 125 coal cutters yearly utilizing its existing facilities at Bombay. Special welding facilities are available at this plant and most raw materials and components can be obtained locally. S. C. Jain, Larsen & Toubro Ltd. (L&T), L&T House, Narottam Morarjee Road, Ballard Estate, Bombay 400 038, India. WTDR. P-74290. OPIC.

3622 — CANADA — Specializing in production of equipment for utilities, this firm seeks commercial arrangements with a U.S. producer of **electronic industrial controls for use in automation of paper mills, mining and iron metallurgy facilities.** Canadian firm is open to a joint venture, cross-licensing agreements, subcontracts, and marketing arrangements. It would prefer U.S. company with annual sales volume between $5 and $10 million. Canadian concern produces and distributes annunciators, telemetering and telecontrol units, and voltage level switching equipment. Miss Doris Atkind, Trade Promotion, European-American Banking Corp., 10 Hanover Square, New York, N.Y. 10005. P-74281.

3632 — ISRAEL — Seeks license or joint venture to manufacture **frost-free refrigerators.** Also prepared to locally assemble parts. Would be interested in U.S. firm whose product line includes air-conditioning units, ranges, and washing machines. Firm owns and markets products of large manufacturer of refrigerators and washing machines. Has agency distribution network throughout Israel. M. Yedidia, General Manager, Mefizim Distribution & Marketing Co., Ltd., 95 Allenby St., Tel Aviv, Israel. P-74282.

3651 — INDIA — Seeks license to produce **tape recorders.** Firm plans to manufacture 30,000 portable tape recorders annually at its Bombay facilities. According to company, basic raw materials and components are available locally. Presently, concern makes television receiver sets; annual capacity is 2,500 units. S. C. Chokhani, Partner, Sudarshan Electronics Corp., 138 Kalbadevi Road, Bombay 400 002, India. WTDR. P-74287. OPIC.

3679 — FRANCE — A small firm seeks a **joint venture to extend its distribution of U.S. electronic components and measuring instruments throughout France and the EEC.** Company seeks capital investment of approximately $100,000. It already has marketing agreements with several American firms and sells to the French aerospace, petrochemical and automotive industries. Located near Toulouse in southwestern France, firm presently makes measuring instruments. Mr. Bigot, General Manager, Pyrenees Electronique Systemes, Route Lacroix Falgarde, Pinsaguel, 31120 Portet sur Garonne, France. WTDR. P-74264. Copies of firm's proposal (in French) are available from Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230.

3714 — THAILAND — Seeks joint venture or licensing agreement to produce **gasoline tanks for passenger automobiles.** Firm, auto distributor employing 10 people and having annual sales of $100,000, was established in 1969. In 1972, 18,578 motor vehicles were assembled in Thailand and the Government encourages the use of locally produced components. Sajja Limsavadewong, Manager, Newton Siam Ltd., Part., 1234-6 New Petchburi Road, Makasan, Bangkok, Thailand. WTDR. P-74265. OPIC.

Food-Processing Industries Meeting Set For Amsterdam

The United Nations Industrial Development Organization and the Food and Agriculture Organization, in cooperation with the Council of the Netherlands Industrial Federations, are sponsoring a conference on selected food processing industries Oct. 21-25 in Amsterdam.

The meeting is to bring together, on a worldwide basis, businessmen and government officials interested in exploring possibilities for cooperation in undertaking projects in developing countries. Discussions will be limited to these six areas: sugar, vegetable oils and proteins, fruits and vegetables, non-alcoholic beverages and beer, food processing and packaging equipment, and packaging materials.

A paper on investment and industrial cooperation in food processing in developing countries will be presented and discussed at the meeting. Panel presentations, and confidential, person-to-person interviews will also take place.

Proponents of projects in developing countries will submit information on specific proposals prior to the meeting. Enterprises in industrialized countries are also invited to submit proposals for cooperation, including offers of joint ventures, finance, supply of know-how, subcontracting, export marketing or transfer of manufacturing processes to developing countries.

Inquiries may be directed to James S. Crooke, Industrial Development Officer, Room 2766, UNIDO, United Nations, New York, 10017; phone, 212-754-1234, ext. 3834. P-74289.

Licensing In U.S.

For additional information on these opportunities to manufacture foreign firms' products in the U.S. under a licensing agreement or in partnership, write the Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2248), referring to the appropriate file number.

AUSTRIA—A large Austrian company, one of the leading European manufacturers of **Loden fabrics,** would like to license technology for production of these materials to U.S. firms. Loden fabrics are increasingly popular for sports and leisure wear. The ideal licensing partner would be a carding mill equipped for wool flock dyeing, carding, spinning, weaving preparatory, wet finishing, teasing and fulling, and dry finishing. Cross-licensing and joint venture arrangements will also be considered. **File 2576**

FRANCE—License for manufacturing **cryogenic valves** used in specialized liquified natural gas tankers is offered by a French company. Renowned for its ship propellers and high-feature valves, this large company has supplied valves for a number of large tankers and has concluded a licensing agreement with a well-known Japanese manufacturer. **File 2577**

GERMANY — A German firm is seeking a U.S. licensee to manufacture its new **cordless electric iron,** recently patented in the United States. Safety features ensure that a shock cannot be transmitted to anyone touching the current-carrying base, and that the iron can rest indefinitely in the base when not in use without danger of a fire. **File 2578**

GERMANY — A license is offered by a German company for manufacture of **flexible conveying equipment and screw conveyors.** This equipment can be used with free-flowing powders and granular materials in the chemical, plastics, pharmaceutical, cosmetics, food, milling, fodder processing, and other industries. Applications include filling and emptying hoppers, containers, granaries, silos, funnels, casks, and drums; feeding extruders, automatic machines, mills, and weighing, dosing, and mixing machines; and loading and unloading vehicles. **File 2579**

SWITZERLAND — Manufacturing and distribution rights for a **snap-on, threadless tube and bottle cap** are being offered a U.S. licensee by a Swiss firm. The new cap is already being used in Switzerland by a famous brand of toothpaste. Patents have

been applied for in several industrial countries, including the United States. **File 2580**

SWITZERLAND — A small Swiss manufacturer of induction measuring instruments is seeking a U.S. licensee for the manufacture of an **electric, automatic eccentricity measuring and control device.** For use in electric wire production plants, the main application of the system is in the control of automatic wire extrusion machines where it provides continuous measuring, reading, and control of the manufacturing process. Despite its size, the company has sold its units to clients all over the world, including the United States. **File 2581**

SWITZERLAND — Firm wishes a U.S. licensee to manufacture its **solid-waste compacting and transportation system** for installation on trucks. Claiming about 90 percent of the Swiss market, this system is already manufactured under license in five European countries. It comprises a container with a loading capacity of over 15 cubic meters and hydraulic compacting and emptying equipment, and is designed for heavy duty operations requiring a minimum of maintenance. **File 2582**

SWITZERLAND — An importer and distributor of machine tools is offering its **motor spindles** for manufacture under license in the United States. These spindles, or linear actuators, are driven by electric motors and are equiped with an automatic overload release clutch. They are already manufactured and sold in Japan and a number of West European countries. **File 2583**

New Honduran Forestry Law Limits Foreign Investment

A new Honduran forest law, Decree 103, limits foreign participation in forestry operations to manufacturing enterprises. The law also creates a government agency responsible for all forest operations and the marketing of lumber and wood products. The semiautonomous organization, the Honduran Corporation for Forestry Development (COHDEFOR), will exercise control on public and private land.

Several aspects of Decree 103, issued in January, are particularly applicable to existing and potential U.S. investments in forestry projects in Honduras. Article 7 sets maximum foreign equity participation in any forestry area at 49 percent and specifies certain enterprises which must be 100 percent Honduran owned. In those ventures open to foreign investors, the Hounduran capital can consist of contributions from COHDEFOR or the Honduran private sector or a consortium thereof. In the case of forestry enterprises which the Government views as a basic for the country's development, COHDEFOR or another State entity must have a minimum 51 percent equity share. Decree 103 also makes the exporting of wood and its internal wholesale marketing an exclusive function of COHDEFOR.

Industrialization of forestry resources is of great interest to the Honduran Government and investments are (subject to Article 7) encouraged in manufacturing activities. These could include production of such wood products as mouldings, crates, and containers, as well as paper and pulp.

U.S. companies interested in buying lumber or wood products from Honduras or making an investment in this area should write: COHDEFOR, Edificio Midence Soto, 3er, piso, Tegucigalpa.

An English language translation of Decree 103 is available from: Honduran Affairs, Room 4039, U.S. Department of Commerce, Washington, D.C. 20230.

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Trade Opportunities Division, Room 1322, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufactures.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

Abbreviations used are: I (importer); D (distributor); M (manufacturer); A (agent); R (retailer). To avoid delays, requests for loan material must specify country, commodity, foreign government agency.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information, including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

Direct Sales

Foreign enterprises are interested in direct purchases of these products. See also "Representations" listings.

Fisheries

09190 — JAPAN — Tortoise shell. 200-300 lbs., preferably those produced in Caribbean Sea, for resale to mfrs. of eye-glass frames. Reply to — Mr. H. Nameda, pres., Kindai Trading Co., Ltd., No. 3 Hayashi Bldg., 8 Shimizudani-Cho, Tennoji-Ku, Osaka. Cable Kindaitrade Osaka; tel 06-761-3381.

Textile goods

2298129 — KUWAIT — Rope, polypropylene, of different specifications: 8″ circ, 8 strand, 3½″ circ, 8 strand, etc. Also interested in importing rope, manila: ½″, 1″, 2″ & rope, nylon: ¼″ to 1″, in substantial quantity for own stock. Buyer wants interested suppliers send descriptive catalogs & quote c & f Kuwait. Firm is often successful bidder on Kuwait Oil Co. tenders. KOC is largest oil producing co. in Kuwait. Reply to — P. K. Koshy, Mgn. Dir., Fares Al-Dabbous & Partner Trading Co., P.O. Box 7185, Fahaheel. Cable: Freepor, Kuwait; tel 914787. WTDR 6/73.

Glass, glassware

3229312 — MALAGASY REP. — Fiberglass matting for use in reinforcing polyester resin. Type M-1. Three types required: (1) 300 grams/sq. meter weight—105 cm width; (2) 450 grams/sq. meter—105 cm width; (3) 600 grams/sq. meter—115 cm width. Annual consumption 12-20 tons. Wishes receive price quotations. Correspondence in French preferred but English acceptable. Reply to — Louis Rene Marc, Dir., Compagnie Malagache de Produits Metallurgiques et Plastiques (Comeplast), 17 Rue Reallon, B.P. 1241, Tananarive. Cable Compametaux; tel: 223-67.

Steel mill products

33100 — ITALY — Various sizes and quantities of steel and cast iron pipe used for water pipeline construction. Requirements estimated 15-20,000 mt steel pipe and 10,000 mt cast iron pipe annually, with a value in excess of $5 million. Interested firms contact Mario Cutino, Capo Ufficio Approvigionamento del Servizio Acquedotti, Cassa Per Il Mezzogiorno, Viale Della Civilta del Lavoro, Rome, Italy. CIF prices and delivery terms desired.

●**33100 — PAKISTAN** — Various sizes and quantities of seamless steel pipes for steel tubular poles. Tender No. PE-ADB-TI/3; bid deadline June 22. The Karachi Electric Supply Corp. Ltd., Aimai House, Abdullah Haroon Rd., P.O. Box 7197, Karachi. Tender to be financed by loan from Asian Development Bank special funds. Tender documents available from above address for $10.

●**33100 — INDONESIA** — 284,000 sq. meters mild steel. Tender No. 003-ADB-SPDP-74; bid deadline July 1. Port Administration of Tanjung Perak, 620 Jalan Perak Timur, Tanjung Perak, Surabaya, Indonesia. Specifications available from above address. Purchase financed by funds of Asian Development bank.

●**33100 — BURMA** — 5,000 long tons of 75 lb. medium manganese flat bottom rails. Tender No. BRC/IDA/12(T)54(E)73-74; bid deadline June 19. Burma Railways Corp., Bogyoke Aung San St., Rangoon. Specifications available from American Embassy, Rangoon, at $6.45 per set.

●**33100 — BURMA** — Supply of 158,000 elastic spring rail spikes. Tender No. BRC/IDA/12(T)56(E)73-74; bid deadline June 19. Burma Railways Corp., Bogyoke Aung San St., Rangoon. Specifications available from Iron and Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230, phone 202-967-2438.

Rolling, drawing, extruding of nonferrous metals

●**33500 — ALGERIA** — Symmetrical pairs, telecommunications link. Bid deadline extended to June 15. Ministere des Postes et Telecommunications, 4 Blvd. Salah Bouakouir Algiers. Tender documents available at above address.

●**33500 — CYPRUS** — Supply of 750,000 yards of various sizes of bare copper conductors and 132,000 yards of various sizes

of P.V.C. covered non-sheathed and P.V.C. insulated and sheathed copper cables. Tender No. E.4/787/4108/74; bid deadline June 14. The Electricity Authority of Cyprus, P.O. Box 4506, Nicosia. Tender documents available at above address at $56.60 for set of four documents.

●**33500 — THAILAND** — 192,000 lb. hot rolled copper rods suitable for further fabrication into electrical conductors. Material to be made from electrolytic copper of such quality in accordance with ASTM designation: B5-43 and min. purity of 99.90%. Tender No. ADB-MEA-212; bid deadline July 19. Purchases and Stores Department, Metropolitan Electricity Authority, 121 Chaketch St., Bangkok 2. Tender documents available on loan from Iron and Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230, phone 202-967-2438.

Special industry machinery

●**35500 — ALGERIA** — Turnkey plaster plant at Fleurus, Oran (Western Algeria). Tender No. not specified; bid deadline June 15. Submit offers to: Direction Technique, Projet Platre, S.N.M.C., Rue de Constantine, B.P. 45, Kouba, Algiers. Cables: SNMC Alger. Telex: 52812. Phone: 63.98.65 and 66. Correspondence in French required. French tender documents available at cost of DA 200 (approx. $52.63 U.S.) from above address.

3559589 — BOLIVIA — Wood lamination plant. Laminates to be used for mfg. furniture. Daily production of 10 cu. meters is projected, 250 cu. meters/mo., 2,750 cu. meter/yr., based on 8 hr. workday. Plant to be located in Santa Cruz. Used or reconditioned equip. requested if possible. Required equip. as follows: one wood laminating unit for 2.40 meter laminates with gear box, Norton type for logs 1.15 meter or more in dia. One guillotine, pedal type to cut 2.40 meter; one steam oven, surface heating of 180 sq. meters, new tubing, measuring instruments, safety valves & certified for 12 atmospheres; one sharpener for cutting knife, 2.40 meters long; one guillotine 2.40 meters; 5 motors, one ea 25 hp, 20 hp, 1½ hp, 3 hp & 5 hp. Electrical specs.: 3 phase, 50 cycles, 220 volts. Two cutting knives, guillotine; 3 cutting knives, for laminating unit; one rotating crane, portable; one mechanical dryer with 3 conveyors, all steel with air for 180 cu. meters/min., & heating to 80 degree C with control instruments, humidity measuring & reduction speed accessories; 3 dollys to transport laminates; 2 mechanical hand saws; one mechanical tree trunk lifting (out of ground) unit; circular saw. Laminates will be 0.6 mm, 1.0 mm, 2.0 mm, 3.0 mm thick. WTDR in preparation. Reply to Renato Chirino, Albren Ltda., Casilla 1195, La Paz.

Service industry machines

●**35850 — SYRIA** — A request for bids has been issued by the Union of Textiles, Fardoss St., Damascus for designing, supplying and mounting of airconditioning units for textile laboratories. Bid deadline July 15. Booklet of terms may be obtained from above address. No specifications available.

Communications equipment

36600 — GERMANY — NATO — Bundesamt Fuer Gewerbliche Wirtschaft, 6 Frankfurt/M1, Bockenheimer Landstrasse 38, Postfach 2411 has requested prequalification applications from firms interested in participating in supply and installation of a radio relay system (CIP67), including microwave facilities in the 8 GHz region, multiplex, remote control, power supply, shelters, test equipment, and civil engineering works. Notice of intent number ICB 40-24-50(7)74. Prequalification bid deadline is June 11. Only firms certified by the U.S. Dept. of Commerce are eligible to bid on NATO procurements. U.S. firms interested in certification should contact the Science & Electronics Division, BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230, telephone 202-967-2328. Copies of notice of intent and prequalification applications are available from the Science & Electronics Division, BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230, telephone 202-967-2939.

Instruments for measurement, control and analysis

●**38200 — BELGIUM—NATO** — The Purchasing and Contracting Officer, Supply Branch, IHSC SHAPE, 7010 Belgium, has issued tender No. IFB 74-09 PS/CIB for signal and measuring generators and corresponding sets of manuals; also distortion analysers and manuals. Bid deadline is June 14. Only firms certified by the U.S. Department of Commerce are eligible to bid on NATO procurements. U.S. firms interested in certification should contact the Science and Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, telephone 202-967-2328. Copies of tender announcement and specifications available from above address, or on a short-term loan basis to firms located in the U.S. from the Science and Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, telephone 202-967-2939, after certification.

Miscellaneous durable goods

50930 — CANADA — Scrap consisting of aluminum castings. Specifications are NASMI and tense. Quantity and price f.o.b. New York City are 500 short tons per month at 13 U.S. cents per pound (price subject to further negotiations). Inspection by Far East superintendent prior to loading. Shipment in one lot per month upon receipt of L/C and in full 35 foot (Sealand) or 40 foot (U.S. line) container (H/H) at buyer's option. Payment by irrevocable L/C at sight or 120 days sight; interest for buyer's A/C. Special term; This offer is valid only subject to approval of import license by Taiwanese Government. Mr. Chang is Montreal rep. for Fuko Enterprise Co Ltd., O. 92 Ming Tso East Rd., Taipei, Taiwan. Destination of the scrap shipments is Taiwan and ultimate end use will reportedly be there. Write—Mr. Jim C. Chang, Representative, Fuko Enterprise (Canada), 7111 St. Denis St., Montreal 327, Quebec. Telephone (514) 274-2457.

Antique, secondhand stores

59300 — JAPAN — Antique automobiles, assembled, from period 1900 to 1910, in any condition so long as suitable for repair & restoration. Buyer est. cost at $10,000 per unit but realizes this would vary according to type of car, condition, etc. Buyer would like to examine photos, other specifications. Restoration of antique automobiles is hobby of Mr. Doi, who is also President of Doi (camera) Co., Ltd., major camera retail firm with more than 70 outlets in Japan & an office in New York. Because he is prepared to spend any price necessary for automobiles that suit his needs, Mr. Doi could represent a real opportunity for U.S. supplier willing to correspond with him. Mr. Doi is personally & professionally well & favorably known to the consulate. Reply to — Mr. Kimio Doi, 12, 1-Chome, Hakata-Eki-Higashi, Hakata-Ku, Fukuoka. Tel. (092) 431-0002.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Anthracite

1111X — VENEZUELA — Coal. Exclusive agency or distributorship. Firm is large distributor of industrial machinery, with sales & service facilities throughout Venezuela. Represents several important U.S. companies. Capably managed with excellent position in market. Reply to Mr. Rafael Aleman R., Saver Guinand, C.A., Apartado Postal 61208, Edificio Savar Guinand, 2da. Calle No. 34, Los Ruices, Caracas. Telex: 21441.

Yarn, thread mills, products

2284121 — CANADA — Finished cotton crochet thread for use in home. Excl. distrib. for all of Canada required. Would purchase on own account and stock in warehouse. Telephone or write—Mr. R. N. Ward, Pres., Barr & Mackey Ltd., 6426 Notre Dame St. West, Montreal, Quebec H4C 1V4. Telephone (514) 935-2914.

Household appliances

3631255 — MALTA — Kerosene cookstoves; first order to be about 200. Requests c.i.f. Malta prices & catalogs. Reply to — Mr. Eric P. Schembri, Asst. Gen. Mgr., Muscats General Stores Ltd., 15-16 Kingsway, Valletta. Cable: Musgensto-Malta, tel: 28228, 26242, 29456. Excl. agency & dist.

South African Railway Board Will Buy Locomotives, Wagons

The Chairman, Railway Tender Board, P.O. Box 7784, Johannesburg, South Africa, invites bids for tender 1070 70345, 50 class-35 diesel electric locomotives. Tender documents may be inspected at the Chief Stores Superintendent, Melhof, 2 Melle St., Braamfontein, Johannesburg, and may be obtained there against payment of a deposit of R50 per set. The relevant drawings may be purchased for the sum of R10 per set, which is not refundable. Tenders will be received until July 26.

In addition, the Chairman of the Tender Board invites bids for tender 1020 70381, 400 bogie flat wagons for conveyance of containers, type SHD-3. Tender documents may be inspected at the above address, or obtained from there against payment of a deposit of R30 per initial set, and R30 per additional set. The relevant drawings may be purchased for a non-refundable fee of R40 per set. Tenders will be received until July 5.

Venezuelan Public Works Unit Opens Prequalification Process

Venezuela's Ministry of Public Works has opened prequalification procedures among companies in Venezuela for equipment to be installed at the new passenger terminal at Maiquetia International Airport.

While these tenders are only for national firms, which would include foreign firms' subsidiaries in the country, very little of the material requested is manufactured in Venezuela. American manufacturers of such equipment with interest in supplying might alert their subsidiaries, distributors or agents accordingly.

The following equipment is desired: bid L-74-MIQ-6 — air conditioning plant including water pumps, cooling towers, and control centers; bid L-74-MIQ-7 — seven telescopic type, apron drive boarding bridges; bid L-74-MIQ-8 — baggage handling system with six race track type delivery stations, 675 meters of conveyor bed type and 105 meters of roller type; bid L-74-MIQ-9—four 1,820 kilo passenger and four 1,500 kilo service elevators plus six escalators; and bid L-74-MIQ-10 — high voltage equipment including breakers, substations, and incoming cells.

Necessary documentation required is normally available to the Venezuelan firms.

Indonesian Fertilizer Company Seeks Information On Suppliers

The Indonesian state-owned fertilizer company, P.T. Pusri, is soliciting prequalifications of suppliers interested in receiving invitations to bid on an IBRD-funded urea fertilizer complex, including a 1,000 MT/D ammonia plant and a 1,725 MT/D urea plant, to be installed at Palembang, Sumatra. This complex, an expansion of existing urea facilities, includes auxiliary power generation, bagging, storage, and handling and other ancillary facilities. Pusri, or its engineering contractor, will handle all procurement.

Suppliers interested in receiving invitations to bid are invited to provide information listed below by May 31 to: Dr. Entol Soeparman, P.T. Pupuk Sriwidjaja, c/o The Kellogg Company, 1300 Three Greenway Plaza East, Houston, Texas 77046: description and capacities of manufacturing facilities; components usually subcontracted and availability of spares and service in Indonesia; latest annual report and balance sheet; experience with similar equipment including list of customers where similar equipment is in service; and approximate delivery schedules.

Please address inquiries to Director, Overseas Product Sales Group, Room 2315, Dept. of Commerce, Washington, D.C. 20230; phone 202-967-4523.

Quarterly Construction Summary Is Available

A quarterly summary of future construction projects abroad, contract award stories and significant foreign government tenders published in *Commerce Today* and *Commerce Business Daily* during January, February and March is available to U.S. firms from the U.S. Department of Commerce, Trade Opportunities Program, Rm. 1322, Washington, D.C. 20230.

A pre-addressed mailing label should be included with the request to facilitate processing and mailing. The summary, which may also be reviewed at any of the 43 Commerce District Offices, alphabetically lists project summaries by country in five distinct classes: airport, seaport, railroad and highway projects; hydro and thermal electric plant irrigation projects; hospital, hotel and housing projects; industrial plant projects; and comprehensive development projects. Whenever possible, names of contractors and responsible agencies are cited, as well as original publication dates.

A limited number of copies of the fourth quarter 1973 summary is also available upon request and will be distributed on a first-come basis.

Future Construction Abroad

INDIA — The Calcutta Metropolitan Development Authority (CMDA), Calcutta, a statutory body established by the Government of West Bengal, has decided to import **special steel and equipment** worth $10 million to execute several essential projects for water supply, sewerage and drainage, garbage disposal and road construction. IDA will provide sufficient foreign exchange to finance the CMDA's global procurement.

MALAWI — The Government of Malawi's Director of Civil Aviation, Mr. B. Fitz-John (British), Box 30200, Chichiri, BT.3, announced that a new international airport is to be constructed at Lilongwe. The British Government has completed a feasibility study and a steering committee has been established in Blantyre. Work has been scheduled to start in 1977 and the airport is to be operational by the end of 1978. The cost will probably be around $40 million but at present no source for financing is in sight. Mr. Fitz-John pointed out that most, if not all, of the equipment not available locally will be purchased from the country funding the construction.

CANADA — Dow Chemical of Canada, Ltd., Vidal St., Sarnia, Ont., has authorized **construction of a $65 million vinyl chloride production facility and expansion of a chlorine-caustic plant** at Fort Saskatchewan, Alberta. Dow has also announced that a $100 million petrochemical plant is proposed as a part of its Alberta program, subject to a favorable decision on the company's application now before the National Energy Board for a pipeline system connecting Alberta and petro-chemical centers in Sarnia, Ontario.

PORTUGAL — Lisbon's Municipal Council approved the **1974 Budget (U.S.$46.9 million) and Six-year Plan (U.S.$372.5 million) for Lisbon.** The American Embassy in Lisbon has compiled a list of city directors for relevant sectors, all of whom may be contacted at the Camara do Municipio de Lisboa, Praca do Municipio, Lisbon 2: Dr. Manuel dos Santos Ferreira, Director dos Servicos de Financas (finance, economic studies, planning etc.); Eng. Jaime Pereira, Director dos Servicos de Salubridade e Transportes (sanitation, garbage, street cleaning, veterinary services); Eng. Eduardo Melo Oliveira, Director dos Servicos de Urbanizacao (urbanization, zoning, architectural studies, etc); Eng. Rui Martinho Poole da Costa, Director do Gabinete Tecnico de Habitacao (housing); Eng. Jose Maximo de Castro Nery, Director dos Sercos Tecnico-Especiais (street lighting, mechanical and electrical installations, traffic and traffic lights, planning and upkeep of parks, etc.); Eng. Ciro de Oliveira Pinto, Director dos Servicos de Obras (construction and repair of streets, sewage, housing construction and maintenance, etc.).

EL SALVADOR — COMAPAN (bakers group), San Salvador has received financing to **purchase equipment for establishment of a flour mill.** The Government of El Salvador small business loan organization (FIGAPE) has approved a loan to the bakers of $880,000 and has reportedly promised to grant or obtain financing for the remainder of the roughly $2 million the mill is estimated to cost. Early reports set a date of June 1975 for the plant to come on-stream. Capacity of 14,000 metric tons annually is projected.

THAILAND — Prasit Development Co., Ltd., a newly-established firm, has been granted industrial promotional privileges to build a **156-bed general hospital** on an acre of land on Sri Ayudhya Rd. in central Bangkok. According to preliminary estimates, land and building will cost approx. $850,000, imported medical equipment and supplies around $750,000 and local materials about $250,000. The firm is interested in communicating with U.S. manufacturers and exporters of equipment and supplies that may be needed, and is also seeking low-interest and long-term financing. Contact: Prasit Ourairat, Prasit Development Co., Ltd., 184 Fourth Fl., Asoke Rd., Sukhumvit Soi 21, Bangkok.

TURKEY — **Akdeniz (Mersin) ammonia plant project** comprises production of 240,000 tons/year (800 tons/day-24 hours) ammonia for the Mediterranean Fertilizer Corp. in operation at Mersin. The proposed project will be located adjacent to the Mediterranean Fertilizer Corp. Azot Sanayii A.S., the Government of Turkey agency responsible for the project, is exploring the feasibility of using lignite as raw material. Azot expects to complete the study this year. The project cost is estimated at $50 million including approx. 60 percent for foreign exchange expenditures. The Turkish Ministry of Finance will seek foreign financing from the World Bank, EIB, etc. Basic categories of equipment to be procured include: reactors, turbines, reformer column, compressors, etc., which would be valued at approx. $25 million. Azot plans to handle the project on a turnkey basis if it is not required under foreign credit terms to go into tendering on a piecemeal basis. Interested firms may write directly to The Nitrogen Industry Corp., (Azot Sanayii A.S.), Izmir Caddesi 35, Yenisehir, Ankara.

NETHERLANDS — The Municipality of Amsterdam and the Amsterdam Chamber of Commerce announced plans to jointly found the World Trade Center Amsterdam N.V. This company will build a **world trade center in Amsterdam at a cost of around $60 million.** The area available for building the Center is 2.5 acres; around 50,000 sq. meters of office space will be built. Construction is expected to start in 1975. U.S. exporters of advanced building materials, heating and cooling systems, communications systems, central fire control and security equipment and other building systems offering the latest technology should contact: E. G. Stijkel, President, Chamber of Commerce & Industry for Amsterdam, Koningin Wilhelminaplein 13, Amsterdam, or Mr. Bootsma, Alderman for Economic Affairs of Amsterdam, Stadhuis, Amsterdam.

JAMAICA — The Ministry of Works will put out several tenders by June for **widening and improvement of 37 miles of secondary main roads, improvement of 21 miles of feeder or parish council roads, and construction of 2 miles of by-pass road** in the town of St. Ann's Bay on Jamaica's famed northcoast. The projects are to cost U.S.$23.5 million, of which U.S.$12.9 million will come from the Inter-American Development Bank, and the remainder from the Jamaican Government. The Ministry of Works will supervise the projects. Further information can be obtained from Mr. E. A. Ogilvie, Chief Technical Director, Ministry of Works, 140 Maxfield Ave., Kingston 6.

INDIA — The Government of India has

cleared in principle proposed establishment by Chowgule & Co. Private Ltd. of a $2 million m. ton yearly capacity **iron ore pelletization plant** near Mormugao harbor. The plant is to be completed within two years and the entire production exported. The Chowgule firm has in operation a similar plant equipped by the West German firm, Lurgi. Therefore, quotations, performance and timely delivery of plant machinery are important decision-making factors. Interested parties should communicate directly with: Mr. R. L. Chowgule, Director, Chowgule & Co. Private Ltd., Mormugao Harbour, Goa, India.

HONG KONG — Hong Kong United Dockyards has won a sizable contract for **conversion of a 28,682-ton tanker, the Massachusetts Getty, into an offshore oil storage unit.** In addition, a new superstructure will be built on the tanker. The top deck will be used as a helicopter landing pad. The funnel will be fitted to provide lighting, airconditioning and water services. New machinery such as generators, switchboards, boilers, evaporators, cargo oil pumps, foam firefighting equipment and the ancillary gear are required. For the weather deck other new equipment such as winches, windlasses, lifeboats, hose-handling derrick rings, cargo-oil metering and sampling equipment are required. Interested firms contact: Mr. F. Sheriffs, Procurement Manager, H. K. United Dockyards Ltd., Hunghom, Kowloon, Hong Kong, Tel: 3-334111, or Mr. A. Dewar, Technical Services Manager.

JAMAICA — The Government of Jamaica is applying to the International Bank of Reconstruction and Development for a loan of U.S.$19 million to finance **improvements to the Norman Manley and Sangster International Airports.** A VOR DME has already been ordered for the Sangster Airport, Montego Bay, and similar equipment is to be ordered for Norman Manley Airport, Kingston. Detailed engineering studies are to be carried out before instrument landing systems are installed at both airports. Other improvements contemplated include upgrading of terminal buildings and electric systems at the airports. According to the Civil Aviation Dept., installation of ILS will take place in the next 3-4 years. Interested U.S. suppliers should contact: Civil Aviation Dept., 15 Trinidad Terrace, Kingston 5. Tele: 936-8327.

INDIA — Gujarat State Fertilizer Co. Ltd. (GSFC), P.O. Fertilizernagar, District Baroda, Gujarat, is understood to have received Government of India's "letter of intent" to put up a **second fertilizer plant** at Baroda. The proposed plant will produce 1,350 metric tons ammonia and 1,600 m. tons urea daily, using coal and fuel as feedstock. The project is estimated to cost $161 million, of which the foreign exchange component will be $54 million. Interested firms should communicate with Mr. M. D. Rajpal, Managing Director, GSFC.

PAKISTAN — National Motors Ltd. is planning to establish a subsidiary firm to be called National Wheels Ltd. in order to **manufacture automotive wheels.** The plant will manufacture wheels for trucks, buses, passenger cars, tractors and other light and heavy vehicles. Required production capacity is 150,000 wheels per annum on single shift basis of 2,000 working hours. The firm requests FOB and C&F Karachi quotations and delivery period, also extent of technical collaboration which could be offered and any other relevant information. The firm estimates cost of plant, machinery and spare parts, etc., at approx. $3 million. The Government of Pakistan is expected to finance the plant from its own foreign exchange resources. Interested suppliers should contact Mr. A. H. Qureshi, Technical Director, National Motors Ltd., Hab Chauki Rd., S.I.T.E. Karachi.

HONG KONG — The Hong Kong Government plans to build **eight intra-city super highways** over the next ten years. The cost will be more than U.S. $400 million. Interested U.S. firms should contact Mr. G. A. G. Sapstead, Hong Kong's Principal Highway Engineer, Murray Bldg., 6th Fl., Garden Rd., Hong Kong, Tele: 5-243111, Ext. 2211. Mr. Sapstead is only interested in hearing from consulting firms which have a strong desire to be considered for design and feasibility work in Hong Kong. He does not wish to be inundated by firms' brochures nor does he wish that the Hong Kong Government's interest be considered a general invitation to tender. Mr. Sapstead would prefer to be approached on a personal basis and that the firms give serious and long-term commitment services.

HONG KONG — Modern Terminals, Ltd. (MTL), owners of the container terminal at Kwai Chung, have contracted for site investigation work by Gammon Hong Kong Ltd. on berth five of the terminal complex. Manufacturers of **container handling equipment** interested in supplying for the terminal should contact Mr. Derek Lygo, Managing Director, Modern Terminals Ltd., Berth No. 1, Kwai Chung, New Territories, Hong Kong. Acquisition of the berth four site for development is being negotiated by North Point Wharves, a Hutchison subsidiary. Interested suppliers should contact Mr. W. J. Coburn, North Point Wharves, Ltd., P.O. Box 2211, Hong Kong.

HONG KONG — The Hong Kong Marine Department is planning a multi-million dollar **radar and television harbor surveillance system.** The 550 oceangoing vessels that use Hong Kong's harbor each week and the 20,000 working craft will be monitored around the clock. The 23 sq. mile harbor and all approaches will be completely covered. Potential suppliers of U.S. equipment and know-how should write to Mr. J. M. Mitchell, Marine Officer, Marine Department Planning, 102 Connaught Road Central, Hong Kong.

HONG KONG — Macao's port, so badly silted up by the Pearl River that ships can no longer use it, will be studied with the view to **dredging out a deep water port.** The Macao Government has set aside HK$10 million for feasibility studies and development. If reports are favorable and work goes ahead, the project is expected to cost about HK$90 million. Interested firms should contact: Capitao-Tenente Fausto Morais de Brito e Abreu, Reparticao Provincial dos Servicos de Marinha, Macao.

HONG KONG — The Hong Kong Government has announced plans to develop the present site of the Kowloon-Canton Railroad in Tsimshatsui into a **cultural complex** when the terminal is abandoned upon opening of the new terminal in Hung Ham. Buildings scheduled to be placed on the site include two auditoriums seating, respectively, 2,000 and 1,000, a museum and an art gallery. Designing work will be done by the Public Works Department. Construction will begin in 1975. Interested firms should contact: Mr. A. O. Sales, Chairman, Urban Council, Central Government Offices, 12th Fl., Hong Kong.

FRANCE — The Ford Motor Co. announced its intention to construct an additional **transmission plant** at Blanquefort near Bordeaux. The plant, which will add 1,700 workers to the 2,300 already employed, will produce manual transmissions to complement the company's present automatic transmission operation. Located adjacent to the present plant, the new facility, when completed in early 1976, will turn out 320,000 transmissions yearly for shipment to Spain where Ford plans to produce front-wheel drive vehicles.

JAMAICA — Agreement has been signed between the Ministry of Housing and Gore-Tuca Investments Ltd. for **construction of a housing project** at Braeton, St. Catherine. The scheme, estimated to cost U.S.$16.5 million, will provide 1,500 two-bedroom units over a three-year period. They will be built according to a system developed by Tuca, a Venezuelan firm, and adapted to local conditions. Gore-Tuca is a partnership between Gore-Tuca is a partnership between Gore Brothers of Jamaica and Tuca of Venezuela. The houses will be sold by National Housing Corp., a Government of Jamaica statutory body. The financing will be handled through the Jamaica Mortgage Bank with a guarantee by the government. U.S. suppliers of plumbing and sanitary ware should contact Mr. Philip Gore of Gore-Tuca Ltd. (designers & contractors), 27 Upper Waterloo Rd., Kingston 10, Tel: 925-0030. Developers: Ministry of Housing & Gore-Tuca Investments Ltd., 2 Hagley Park Rd., Kingston 10, Tele: 926-1590.

FRANCE — A German-Swiss group, Korf-Von Moss, and a group composed of Guissani (Switzerland), Best (Germany) and Sud-Acier (France) are each planning to build a **scrap steel mill** in Alsace. The first has chosen a site in the area of the Mulhouse-Ottmarsheim (Haut-Rhin) Rhine port and the second intends to locate in the Strasbourg Rhine area. Both projects are presently seeking French Governmental approval. Annual production capacities of the projected mills are 500,000 metric tons for Mulhouse-Ottmarsheim and 300,000 metric tons for Strasbourg. Interested U.S. firms may contact: for the Strasbourg project—Luigi Giussani, Via Massagno 16, Ch-69000 Lugano (Switzerland); for the Mulhouse-Ottmarsheim project — Korf Stahl, Ludwig Wilhelm Str. 16, 7570 Baden-Baden (Germany) or Von Moss, Aciers, Kasernenplatz 1, Lucerne (Switzerland).

VIETNAM — Saigon International Hotel, Ltd., is planning construction of a **550-room hotel** on land leased from the Government of Vietnam. Construction is expected to begin this fall and to be completed in 1976. The hotel will be managed by Hyatt International. Potential suppliers of equipment, furnishings, supplies and services should contact Mr. Gerald Callahan, Jr., Managing Director, Saigon International Hotel, Ltd., 9 Cong Troung Lam Son, Saigon, Republic of Vietnam.

Seminars On Foreign Ventures Planned For U.S., Switzerland

An institute on "Foreign Ventures Development and Operation," offering seminars in Los Angeles, Oct. 2, 3 and 4, and in Geneva, Oct. 23, 24 and 25, has been announced by the **American Bulletin of International Licensing and Joint Venture Opportunities.**

The seminars will cover such topics as structuring a foreign operation, product evaluation, international business negotiation simulation, selection and assignment of foreign operations personnel, and operating on a multinational basis.

For details and registration forms, write: **American Bulletin of International Licensing and Joint Venture Opportunities,** 3345 Wilshire Blvd., Suite 1111, Los Angeles, Calif. 90010.

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